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ORIGINAL COMMUNICATIONS.

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THE PRINCIPLES OF STUTTERING. (THERAPEUTICS.)*

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Translated by M. A. Goldstein, M.D., St. Louis.

In 1872 when I published my first experimental work[1] on stuttering I offered the opinion as the result of observations of patients in the service of Prof. Oppolzer that the habit of stuttering should be considered as the external expression of a lowered air pressure of the lungs, or in other words, as a diminution of the faculty of breathing. This new theory being contrary to the then accepted views concerning this impediment of speech, raised considerable discussion from many quarters. No less an authority than Kussmaul termed it "one-sided." However, as the result of therapeutics founded on this principle, it was generally acknowledged and accepted as an indispensable factor in the cure of stuttering; all physicians specially interested in defects of speech applied my theory in a practical manner, using "breathing gymnastics" with favorable results in the treatment of this class of cases.

A description of the "gymnastics of breathing," as I originally suggested, appeared in *Die gesammte Sprachheilkunde*, Vol. i, pp. 177 and 233.

The methodically continued breathing gymnastics are still considered and accepted as a prominent principle in the relief of stuttering, and must be considered as a condition *sine qua non*. *How* and *when* these breathing exercises should be applied will be presented in the following observations:

*Paper read by title before the Fourth Annual Meeting of the Western Ophthalmologic and Oto-Laryngologic Association.

These breathing gymnastics must be conducted with the subject in an upright position and with the chest free of clothing incumbrances.

The principal movements to be taken into consideration in these exercises are:

1. The deep continued inspiration.
2. The short expiratory movement of the breath.
3. The gradual prolonged expiration.
4. The holding of the breath.

All of these exercises should call into use a series of muscles accessory to breathing; a special consideration should be given to the diaphragm. The breathing exercises should precede all subsequent exercises of the voice and speech, as the neglect of this factor produces ineffective results in the treatment of stuttering.

The second principle in the therapeutics of stuttering may be termed the *regulation of the vocal and speech-producing organs.* After the respiratory movements have been regulated and strengthened, the voice and the organs of speech should receive special drilling. This is done by enumerating slowly the vowels and diphthongs, then gradually increasing the intensity and rapidity of their vocalization. The tone or quality of the voice used must be neither too high nor too low, a pitch being selected which is within easy range of the pupil.

The speech-producing organs are regulated by first strongly accentuating and loudly pronouncing single sounds and syllables, then words and phrases must be read in the same way, carefully observing that a natural and even tone and pitch be employed.

By these carefully applied exercises the patient gains strength and control of the voice and all disturbing muscular movements and spasms of the muscles accessory to phonation and articulation are thus gradually eased and checked.

As a third fundamental principle of our therapeutics we must enumerate the *disturbance of innovation* which must be considered as a secondary cause of stuttering. Our efforts to control this important factor in the pathology of stuttering consists of: first, elimination, as much as possible, of the spasmodic periods which occasion these disturbances of innovation. Second, diminishing the increased excitability of the nervous system and third, establishing an increased activity of the muscles of speech. To reach this end, it should be our purpose to study each individual case carefully in every detail, that is, to alternate soothing methods and suggestions with stimulation of the nervous system.

Hydro-therapeutics of the most varied kinds, electro-therapeutics and pharmaceutical preparations constitute the active measures employed in these treatments. It is incumbent upon the medical instructor to make the proper selections and direct the proper applications of these therapeutic measures in each individual case.

The fourth principle which must be taken into consideration in the treatment of stuttering is the exercise and strengthening of the will-power of the patient, for without this desideratum a permanent cure of speech-impediment can hardly be accomplished. It is a difficult matter to prescribe a definite procedure for the application of this principle, for so much depends entirely upon the physical and moral characteristics of the patient. It is here that the skill, power of observation and tact of the medical instructor is of greatest value and his physical influence is absolutely necessary to success in this work.

As a fifth and last principle to be considered in the therapeutics of stuttering may be mentioned a *general stimulation and toning up of the system*. It is a general observation that most stutterers are physically weak, anemic and nervous individuals. It is logical to conclude that a weakened condition of the system must have a deleterious influence on the vocal and speech organs, if we take into consideration that the power of this apparatus depends on the harmonious activity of many muscles and nerves which can act rythmically and regularly only when all of the functions of the body are conducted evenly and undisturbed.

It is unnecessary to specify to the rational physician how invigoration and toning up of the system should be secured. In addition to the variations in medical therapy employed in this class of cases as tonics, sedatives, stimulants, etc., hydro-therapy, Sweedish massage and frequent, regular, fresh-air exercises are the most appropriate measures effective in this therapy.

These principles of therapeutics for the relief of stuttering are the result of an experience of twenty-five years in the treatment of speech defects; energy and persistency in their application are the secrets of success, for we deal here with a class of cases which frequently call into question every resource of the physician, to which should be added an acquired high degree of patience and determination in the practical treatment.

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PAPILLOMATOUS GROWTH OF THE TONSIL.

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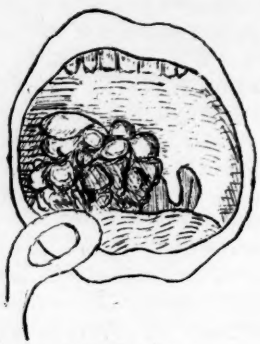
The following case is of interest because of the rarity of benign tumors of the tonsil, the large size which the tumor attained in this instance, and because of its apparent recurrence after removal. Joseph H., aged eight years, was brought to the Throat Clinic of the Massachusetts General Hospital in March, 1899, on account of a large growth of the right tonsil, which interfered with his talking



Growth of Tonsil.

and swallowing, but caused him no pain or other inconvenience. His family history was good, his health excellent, and he had had none of the ordinary children's diseases. The mother first noticed a growth in the right side of his throat three and a half years before. The surgeon, who was consulted at that time, removed a whitish growth, about the size and general configuration of a blackberry. The mother noticed a return in a few months and the growth increased steadily in size up to the time above mentioned. On depressing the tongue, an irregular mamillated mass was visible, occupying the site of the right tonsil and pushing the uvula well to the left. (The accompanying sketch gives roughly the appearance of the tumor as it was seen in the mouth before removal.) The left

tonsil was small and adherent and showed no evidence of previous inflammation. The patient was given primary anesthesia in a sitting posture, and the growth was removed with the cold wire snare. The hemorrhage was of no account, much less than generally occurs after an ordinary tonsillotomy. The tumor measured 1⅝ inches in length by 1 inch in width and ⅞ inch in thickness. (The photograph gives a fair idea of the appearance of the specimen after it had been in alcohol for several months.) Dr. J. H. Wright, Director of the

Pathological Laboratory of the Hospital, gave the following report of the microscopical character of the growth: "The central parts are composed of more or less dense connective tissue with vessels, etc. The peripheral lobulated parts are composed of lymphadenoid tissue and of cellular connective tissue, covered over with mucous membrane. The growth is difficult to classify, but may be called a papilloma for lack of a better name. It is, of course, not malignant." Recovery was uneventful.* The boy has, unfortunately, been lost sight of. Several letters to the address, given by the mother, have elicited no answer. The doctor at the hospital, where the previous operation was said to have been done, writes that he finds no record of such a patient. This is unfortunate, as we are thus unable to find out the character of the first growth removed.

Bosworth[1] gives a résumé of twelve cases of benign tumors of the tonsil. Nine of these were classified as fibromata. Only three

*At the site of the tumor there was no evidence whatsoever of tonsillar tissue remaining.

appear to have involved the whole tonsil. Macleod Yearsley[2] is of the opinion that, while true papilloma of the tonsil is uncommon, other benign growths are comparatively frequent and are often of inflammatory origin and connected with enlarged tonsils. His description of the structure of these "polypi" or "pseudo-papillomata" of the tonsil agrees very well with the microscopic character of my specimen. I cannot concur with him, however, in the statement that benign growths of the tonsil are at all frequent. I base my position in the matter on the very small number of cases reported and, to a certain extent, on my personal experience. In ten years of the study and observation of diseases of the throat in a large throat clinic, this is the only case of the sort I have ever seen. I have seen one case of a pedunculated tumor of the tonsil (probably fibroma) in an adult. This tumor was the size of a robin's egg, and either rested on the tongue or was swallowed by the patient. This patient was lost sight of before the growth had been removed. One reason for this difference of opinion is the fact that Dr. Yearsley includes among benign tumors of the tonsil "tiny polypi, growing from the follicles" in some chronically enlarged tonsils and which in many cases can only be discovered after careful search. Even should these minute polypi, on a more careful examination of excised tonsils, prove to be not uncommon and although they may resemble in microscopic structure the tumor in my case, yet clinically it is difficult to associate them. Moreover, the small growths in Dr. Yearsley's cases appeared in chronically inflamed tonsils, while in my case there had been no sore throats and no attacks of tonsillitis and the left tonsil was, to all appearances, perfectly normal. It seems quite possible that this tumor had its origin in fetal life, from some disturbance in the arrangement of the two varieties of embryonic tissue, which unite to form the tonsil. Case 1 of Yearsley's list appears to resemble my case very closely, and, as it was present from infancy, was probably of similar origin. I should be inclined to include his Case 34 also with these.

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[1] Bosworth: "Diseases of the Nose and Throat," 1892, Vol. 2, page 362.
[2] Yearsley: LARYNGOSCOPE, 1898, Vol. 5, page 79.

TAKING COLD.*

BY FRANK S. MILBURY, M.D., BROOKLYN, N. Y.

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Although the above title is a misnomer, I have in this article retained the name for want of a better one.

Personal experience has taught most of us the unpleasant effects of a cold, but what it is, is still an open question. The mechanism thereof is far from being clear. Notwithstanding numerous theories have been originated to explain the clinical phenomena, still it must be admitted that many of the ordinary conditions existing, following taking cold, are familiar to all men.

In the minds of most people, the word "cold" is naturally associated with a low temperature, and they confuse the idea of "taking cold" with that of absolute cold, regarding the penalty which they suffer as the result of an exposure to cold as due somehow to a direct loss of heat from the body.

This is an erroneous idea, as the body is constantly losing heat, by radiation, in large quantities, often without in any way suffering therefrom. When the demand for heat is very great, as when the temperature is below the freezing point, the supply is fully equal to the demand. A swimmer will plunge into water at a temperature 25° or 30° below that of his body, and remain immersed for hours without any ill effects. And yet the loss of heat by radiation must necessarily be very great. This loss is made up by the rapid heat production which is going on in the system, as the result, in part, of the vigorous exercise which he is compelled to keep up.

Again, in the Turkish bath, after spending some time in a hot room at a temperature of from 150° to 180° or 190°, one plunges into a cold bath, producing only refreshment and invigoration. We have here, then, instances wherein the absolute loss of heat from the body is very great, indeed, and yet the process is attended with no danger to the general system, in the way of taking cold or other penalty. We must therefore look further for some rational explanation of the method by which, and the reason why, we take cold.

Animal chemistry teaches us that bodily heat is produced by oxygenation. Not only by the oxygen taken into the blood through the lungs, but by every process of nutrition, viz.: The growth and

*Read before the Long Island Medical Society, New York, December 5, 1899.

development of the body and that in this process of nourishing the body heat production is going on in every organ and tissue of the organism.

This, then, is the source of animal heat, and the process is not confined to any one portion or member of the organism, but goes on everywhere, maintaining not only the lungs and the heart, and other internal organs at an equable temperature of 98⅝°, but maintaining the limbs at the furthest extremities even, at this same temperature.

Clinical experience teaches us that the penalty of exposure is incurred, not from subjecting the whole body to a lower temperature, but only a portion of it. If, for instance, we sit in a warm room with a draft of air striking only one part of the body, all other portions being protected, or get the feet damp and chilled, the immediate result is almost invariably, a cold. The heat production of the body is regulated by the central nervous system. Let us liken, if we may, this central nervous system which governs the whole matter of warming the body, to a chandelier, say with nine gas jets. If they are all lighted and burning with a steady flame, this constitutes health. Now, if we turn out a portion of them, three or four perhaps, we find that the others flare up with an increased intensity, which we may liken to a diseased condition here or to the inflammation caused by taking cold.

By the above illustration, we may really see that if heat production is arrested in one part, it goes out with increased intensity to another, thus causing inflammatory action in certain parts of the body, locating itself at the weakest points.

In the majority of cases, an exposure to cold results in an acute inflammation of the mucous membrane which lines the nasal passages; in other cases, it gives rise to a sore throat, swollen tonsils, bronchitis, or, again, an attack of irritable bladder, or perhaps lumbago, etc. If one is liable to rheumatic troubles, an exposure to cold will result in an attack of rheumatism, or if liable to any bronchial weakness, acute coryza, etc., the same thing will occur. A cold is not merely a mere local inflammation, because one rarely contracts a cold without feeling a more or less general disturbance. Its onset is rarely marked by a fully developed child, but usually there are quite well marked chilly sensations, pains in the bones, lassitude, loss of appetite, a dull headache and other evidences that the whole system is affected by it. The symptoms usually set in before the local inflammation shows itself, and may last twelve to twenty-four hours before the local inflammatory process manifests itself at the point of selection.

There has been something written about ordinary colds being infectious, but so little investigation carried on that no proof, so far, is adduced.

The prevention of a cold consists practically in the proper regulation of the clothing, preferably wool underclothing all the year round and not very heavy in the winter, many advising the same weight in all temperatures; the maintenance of the skin in its best functional activity by the daily use of a cold or tepid bath; splashing cold water on the chest and rubbed dry with thorough friction, setting the skin in a glow. The proper ventilation of our living and sleeping rooms. Above all, the feet must be kept dry and warm; for certainly there is not a greater source of colds than damp, cold feet. Chest protectors and mufflers should not be worn. In civilized countries, all men dress their heads too warmly, as is evidenced in many ways.

Recognizing the fact that an exposure to cold, as above stated, results both in a local inflammatory process and a general systemic condition, our measures of treatment necessarily must be directed to both. In many instances undoubtedly, a cold can be broken up or aborted at its onset. The period during which this can be accomplished usually is from twenty-four to thirty-six hours after exposure.

The first effect of a cold, as we have already learned, is in a disturbance of the equilibrium of heat production throughout the body; this being arrested, as we understand it, in only a portion of the economy. Our first efforts, then, in aborting a cold will be to restore, as far as possible, this animal heat. In a measure, hot drinks, together with the hot foot bath, will accomplish this. By this method, heat is applied both internally and externally. It is doubtful if there is special virtue in any of the usual decoctions of hot tea prescribed, but generally each physician has his favorite. Probably there is none better than a very hot lemonade with an ounce or two of whiskey. I think the foot bath is preferable to immersing the whole body in hot water, as there is less liability to chill the skin. In addition to the diaphoresis thus produced, we possess two remedies which I believe have a noble influence on the general condition which results from taking cold. These are quinine and opium. In connection, therewith, our hot drinks and foot bath, we administer 10 to 15 grains of quinine with the physiological dose of opium. This, I think, is best given in the form of Dover's powder, 10 grains of which should be taken in connection with the quinine. When the diaphoresis has been thoroughly established, the patient should be

vigorously rubbed with a warm towel until the skin is in a glow, and then placed in bed. The action of the bath and opiates tend to produce a quiet sleep.

In connection with the above measures, it is always well to administer a laxative, and I know of nothing better than calomel in $^1/_{10}$ grain doses, one given every fifteen minutes until ten are taken, less or more, as may be necessary for free action. Its action on the liver seems to have a very beneficial effect, not only on the general systemic condition which accompanies the cold, but also on the local morbid process which results from it. If these measures have been inaugurated sufficiently early and properly carried out, the result will be that the patient will waken on the following morning, after a refreshing sleep, more or less completely relieved, and even if the cold has gained a foothold, the symptoms may be greatly ameliorated by such a procedure. Usually accompanying a general systemic cold are many local lesions of the respiratory tract. Of these, the most frequent is cold in the head or coryza, then there are acute tonsilitis, acute pharyngitis or naso-pharyngitis, acute laryngitis, etc. For coryza, I have found nothing better than atropia $^1/_{1000}$ grain every fifteen minutes until six doses are taken, and then every hour until the throat becomes quite dry, after which continue with the same drug every two or four hours for about twenty-four hours or longer. With this, may sometimes be associated to advantage camphor, grain $^1/_3$, arsenic, $^1/_{240}$, quinine, grain $^1/_2$, morphine, grain $^1/_{60}$, to be given three or four times daily or oftener. On the market are tablets for this purpose. A 2 per cent to 4 per cent cocaine spray, followed by a 5 per cent solution suprarenal capsule, and then an insufflation of aristol or camphor.

Camphor,
Bismuth subnitrate ..... aa grs. xxx to 60
Pulv. acacia ..... gr. xxx

Inhalations of menthol, antipyrine spray are also good, but there is no specific. Acute coryzas are usually caused by local lesions, as deviated septums, septal spurs, hypertrophied turbinates, etc., all of which must be attended to surgically, if necessary, to prevent further difficulties. All other local lesions must be looked after in an appropriate manner.

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TENOTOMY OF THE TENSOR TYMPANI MUSCLE FOR THE RELIEF OF DEAFNESS AND TINNITUS.

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Hurtl suggested the advisability of doing the operation, but it was first performed by Weber-Liel. On account of the uncertain results that have followed the operation it is now rarely performed. We shall attempt to present the facts bearing upon the question and draw therefrom such conclusions as seem warranted by their consideration.

Clinical Data.—(a) Upon inspection the drumhead is found to be retracted, the handle of the malleus rotated and foreshortened, the procesis brevis prominent, and the cone of light broken or wanting. (b) The effect of the retraction of the malleus and drumhead is to increase the pressure on the oval window of the labyrinth, thereby causing more or less deafness and tinnitus. (c) Politzerization is followed by relief of but short duration. The traction of the tensor muscle rapidly overcomes the effects of inflation. If there were no undue traction upon the malleus or drumhead the air would remain in the tympanum several days before it would become absorbed sufficiently to produce retraction. (d) The ability to focus the ear for varying distances at will, and to select at will any individual voice from a number of voices, all of which are talking at the same time, is normal. This function is due, in part, to the action of the tensor tympani and stapedius muscles. If this power is lost, there is probably weakness of the tensor muscle, and the retraction is due to other causes.

We shall find under pathologic data that there are other conditions than shortening of the tendon of tensor muscle which may produce foreshortening of the handle of the malleus and retraction of the drumhead.

Pathologic Data.—There are four pathologic conditions, one or more of which usually produce retraction of the drumhead. They are as follows:

(a) Shortening of the tendon of the tensor tympani muscle.

(b) Stenosis of the Eustachian tube from swelling, hypertrophy, cicatricial bands, adenoids, or paralysis of the palatine muscles.

(c) Cicatricial bands may form in the tympanum and attach themselves to the malleus, drumhead, or mucosa about the margin of the drumhead and thus produce retraction.

(d) There are folds of mucous membrane and ligaments extending from the superior external wall of the tympanic cavity to the head of the malleus and to the body of the incus. These may become contracted, and through their action upon the ossicles cause the handle of the malleus to be rotated backward and inward. The drumhead may be thus retracted without the action of the tensor tympani.

Discussion of Clinical and Pathologic Data.—The object of the operation is to sever the tendon of the tensor tympani muscle and thereby overcome the traction upon the handle of the malleus and drumhead. The undue pressure upon the oval window will thus be relieved and the disturbances of hearing overcome. If shortening of the tensor muscle is the only cause of the retraction, the indications for operative procedure are clear and simple. Unfortunately there are other causes of retraction which may act singly or in conjunction with shortening of the tendon of the muscle. It is difficult, if not impossible, to determine whether the retraction and consequent disturbances of hearing are due to shortening of the tendon alone or to the other pathologic processes. Shortening of the tendon is quite often associated with adhesive bands which become attached to the malleus or drumhead, and with shrinkage of the ligamentous bands and folds of mucous membrane coming from the superior and outer wall of the cavum tympanum to the head of the malleus and body of the incus, all of which may jointly or separately cause rotation and retraction of the handle of the malleus. It is useless to perform tenotomy of the tensor tympani if adhesion or shrinkage of the mucous folds is also causing the retraction. If, however, the shortening of the tendon of the tensor tympani muscle is associated with stenosis of the Eustachian tube, good results may be expected from the operation. It is comparatively rare to find contraction of the tendon unassociated with contraction of the ligaments and folds of mucosa from the vault of the tympanum. If there is inability to focus the organ of hearing for varying distances, or for conflicting sounds, it is fair to infer that the retraction is not due to shortening of the tendon. It seems quite probable that one of the functions of the intrinsic muscles of the ear is to focus for varying distances and to select the sound or tones the listener desires to hear. For instance, a normal ear is approached with a watch until it is distinctly heard; the watch is gradually withdrawn and is heard at a greater distance

than when the ear was approached. If the muscles are weak they will not have the power to focus for the increased distance. A muscle thus weakened will not have the power to retract a drumhead sufficiently to produce the disturbances considered in this paper. In a room where many voices are in conversation a normal ear is able to select the one at will the listener desires to hear. If the tensor and stapedius are weakened the ear cannot select an individual voice at will, but, on the contrary, will only perceive a confusion of sounds. Such muscles are not capable of causing marked retraction of the drumhead and malleus. Hence the presence of muscle weakness is a contra-indication to the operation. I am not aware that this contra-indication has been advanced by others, and I therefore present it to the profession for consideration.

Indications for the Operation.—(a) Retraction of the drumhead due alone to shortening of the tendon of the tensor tympani. This is rare.

(b) If the focusing or selective power of the ear is intact, and there is retraction of the drumhead, it is more probable that the operation will be successful than if the focusing power is lost. (See paragraph on "Discussion of clinical and pathologic data.")

(c) Politzerization followed by relief of short duration is sometimes a favorable indication. If the tendon is shortened the drumhead is so forcibly retracted that the air is soon forced from the tympanum—perhaps in a few seconds or minutes. Unfortunately there are other conditions that will cause the inflation to last but a few seconds, namely, adhesive bands and shrinkage of the ligaments and mucous folds arising in the superior and outer wall of the tympanum and attached to the head of the malleus and body of the incus. It is not always easy to determine whether the retraction is thus complicated in its origin.

Contra-Indications for the Operation.—(a) Retraction due to adhesive bands, shrinkage of the ligaments and mucous folds from the vault of the tympanum.

(b) Inflation followed by prolonged relief. This shows the absence of muscular or other tissue-traction upon the malleus or drumhead. The air under such circumstances would not be sufficiently absorbed for several days to produce retraction.

(c) Loss of the focusing and selecting power of the ear is a sign of weakness of the tensor and stapedius muscles, hence retraction is not produced by the action of the tensor tympani, but is due to other causes.

The Necessary Steps of the Operation.—They are few and rather simple. A knowledge of the topography of the membrana tympanum and middle ear will enable the operator to perform it with comparative ease and safety. The essential steps are as follows:

(a) Test the hearing with the voice—whispered and audible—the watch, the accoumeter and the tuning-forks, including the Weber and Rinnè experiments. The accoumeter and watch should be used to determine the focusing power of the ear.

(b) Thoroughly cleanse and asepticise the auricle and external meatus. A 1-2000 bichloride solution may be used for this purpose. The meatus should be packed with moist carbolized gauze, a pad applied over the auricle and held in position by a light bandage. This dressing should be left on for twenty-four hours. If these preliminary precautions are observed, and all instruments, sponges and hands of the surgeon are properly prepared before the operation the danger of middle-ear infection is reduced to the minimum.

(c) Having removed the preliminary dressing and irrigated the auricle and meatus with the bichloride solution, the drumhead should be incised parallel with the handle of the malleus. This may be done either anterior or posterior to it. Preference is usually given to the posterior position as it is usually more accessible.

(d) Having incised the drumhead the hearing should be tested again. The mere incision of the drumhead will often improve the hearing temporarily, and if the tests are omitted it will not be possible to determine how much of the improvement is due to the tenotomy and how much to the preliminary incision of the drumhead.

(e) Hartman's curved tenotome is perhaps the best instrument to use. It should be introduced through the incision about 3 m.m., the handle of the instrument depressed, and the tendon cut from below upward as the blade is removed.

(f) Test the hearing again and determine the amount of improvement resulting from the tenotomy. This is done by comparing the tests made after the preliminary incision and those made after completing the tenotomy.

(g) Apply a dry aseptic dressing for forty-eight hours, during which time the wound will have healed by first intention.

Results of the Operation.—(a) The handle of the malleus assumes a more vertical position.

(b) The procesis brevis is less prominent.

(c) The drumhead is less retracted.

(d) There may be an effusion of blood into the middle ear. If so it will be absorbed within a few days or weeks.

(e) The chordi-tympani nerve may be severed, but its function usually returns after an interval of a few weeks.

The results as affecting the function of hearing are as follows:

(f) Taking the operations as they are generally selected the results are usually negative or temporary. This is accounted for by the difficulty experienced in selecting cases which are due to uncomplicated shortening of the tendon of the tensor tympani muscle.

(g) Occasionally the hearing is rendered worse.

(h) If the case is one in which the retraction is due to contraction of the tensor tendon alone, the improvement in the hearing and tinnitus is usually marked.

The same conditions that lead to contraction of the tendon of the tensor tympani will at the same time cause contraction of the mucous folds and ligamentous tissue arising from the vault of the tympanic cavity. This fact accounts, in part, for the negative results which so often attend the operation. By bearing in mind all the facts, cases may be selected that will give very satisfactory results.

100 State Street.

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BY RICHARD B. FAULKNER, M.D., PITTSBURGH.

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One pastille dissolved upon the back of the tongue, twenty minutes before using the voice, is useful in clearing the tone when hoarse or husky.

Compound Aconite Pastilles. Anodyne and anesthetic. Each pastille contains: Morphia bimeconat., $^1/_{100}$ gr.; cocaine hydrochlorate, $^1/_{125}$ gr.; tinct. aconite rad., $^1/_6$ minim.; black currant paste, q. s.

Useful for both local and constitutional effects in acute pharyngitis, rhinitis and laryngitis.

Compound Guaiacum Pastilles. Powerful local alterative. Each pastille contains: Resinæ guaiacum, 2 gr.; morphia bimec., $^1/_{100}$ gr.; tinct. aconite rad., 2 min.; oil cinnamom, $^1/_{14}$ min.; pulv. cinnamom, 1 gr.; black currant paste, q. s.

The cinnamon disguises absolutely the taste of the guaiac, and, at the same time, adds to the therapeutic efficiency of the pastille. Guaiac, in this combination is very pleasant, very potent and very prompt in reducing the inflammatory engorgement in tonsillitis, acute pharyngitis and in the removal of arthritic throat affection. The peculiar acid of black currants seems to enhance the efficiency of all these forms of pastilles, and the currant jelly or paste renders the above formulæ permanently plastic, soluble and pleasant.

*These pastilles prepared by John F. Hancock, Chemist, of Baltimore.

SOCIETY PROCEEDINGS.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON LARYNGOLOGY AND RHINOLOGY.

Stated Meeting, December 27, 1899.

Robert C. Myles, M.D., Chairman.

Repeated Intubation for Persistent Laryngeal Stenosis.

Dr. Joseph A. Kenefick reported this case. The patient was a colored child, two years and a half old, who had come to the Manhattan Hospital last June with laryngeal diphtheria, as proved by bacteriological examination. At Willard Parker Hospital the child had been intubated, but on attempting to remove the tube the dyspnea had returned. Altogether the child had been intubated thirty times, the longest time without a recurrence of the dyspnea having been from September 28th to October 12th. After leaving the hospital the dyspnea had returned, and on October 13th until the present month he had been intubated with successively larger tubes. On December 19th, on attempting to remove the tube, it had been found out, and the nurse had then declared that the little one had been talking well for several days. The tube had been last replaced on December 3d. The speaker said that the literature of this subject was very meager, only two or three articles having appeared. The child was presented largely with the object of calling attention to the fact that although it had been intubated forty times it was still able to phonate.

Dr. W. C. Phillips remarked that a recent writer had suggested that the probable cause of this prolonged stenosis was the use of too large a tube in the first instance.

Adenoma of the Nose—Operation.

Dr. Thomas J. Harris presented a woman of thirty-two years who had come to him last summer with complete stenosis of the nose, and a history of a number of operations for the removal of polypi. Examination showed the nose to be filled with a sensitive tumor com-

pletely stenosing both sides, and bleeding readily when touched with a probe. A small portion of tissue had been removed and examined by Dr. Henry T. Brooks, who had reported the case to be one of pure adenoma, the appearance of which suggested more or less malignancy. For this reason Dr. Harris said he had employed Beckel's operation. On turning the nose over to the left side he had secured ready access to the nasal cavities, and had then discovered that the tumor extended both into ethmoidal cell and into the sphenoidal and maxillary sinuses on both sides. So far as could be determined there was no involvement of the frontal sinuses. The patient had been discharged from the hospital on the eighth day, and there had been no recurrence thus far. As the tumor had involved the septum as well as the sinuses it had been necessary to sacrifice the septum. The bleeding had been very profuse at the time, but had been controlled by the use of a gauze tampon. He had found this operation a very successful one, no large vessels being encountered, and the wound almost always healing by first intention. There had been no involvement of the fundus of the eye. Dr. Harris said that he had seen three other cases of adenoma of the nose, one occuring in a man of sixty years. The second case had been lost sight of. The third case was a pure adenoma, and had already recurred three times. He had removed it at each operation by intranasal means entirely, and it had remained free from recurrence for periods of six or eight months at a time.

Diabetic Ulceration of the Throat.

Dr. W. Freudenthal read a paper on this subject. He said there existed two different forms of these ulcerations, viz.: (1) malignant, and (2) benign. The first case reported was that of a woman, forty-five years of age, who had suffered from diabetes for nine years previously. When first seen deglutition had been very painful, and examination had revealed a broad ulceration, beginning on the left side of the uvula and extending downward towards the pillars for about one inch. There was also another smaller ulcer involving the anterior part of the left tonsil and the anterior pillar. The whole picture resembled tubercular ulceration, but there were absolutely no signs of this disease present elsewhere or on microscopical examination of the secretions from the part. The lactic acid treatment had been tried, but without any benefit. When seen five weeks later, and a few days before her death from inanition, another ulcer had developed on the right side, and the first ones had become larger and deeper. The second case was that of a woman of fifty-eight years.

Inspection had shown an extensive ulceration on the left side of the tongue, extending over its edges, and corresponding to this an ulcer on the mucosa of the cheek. Here, too, lactic acid gave no result. Her physician stated that she had developed diabetes about two years previously, and he was positive from long acquaintance with her that there was not the slightest ground for believing syphilitic taint. She died about five months later. The third case was an example of benign ulceration. The patient was a man of seventy years to whom he had been called as a last resort. The man had been extremely feeble at the time, so that examination had been most difficult. There was a deep ulcer on the laryngeal surface of the epiglottis, extending down as far as one could see, and the interarytenoid space was also ulcerated. An application of orthoform had been made at once, and had been continued daily for weeks with most gratifying results, although at the time of instituting it the family had objected to any local treatment because they thought it cruel to annoy a dying man. The speaker said that to get good results from this treatment it was essential to carefully cleanse the ulcerated surface before making the application of orthoform emulsion. After the larynx had been anesthetized with cocaine he injected as much of a syringeful of his orthoform emulsion as the patient could bear. If too much were injected it would run down into the trachea and excite cough. The emulsion consisted of from 1 per cent to 10 per cent of menthol along with sweet almond oil, yolk of egg, orthoform (12 per cent) and distilled water. This man had been treated up to June 12 and had improved greatly in strength. When seen again in September there had been superficial erosions on both sides of the uvula, and the whole soft palate was rather edematous. These had disappeared in a few days and he had since been entirely well. The fourth case was that of a physician, thirty-nine years of age, with ulceration of the tonsil, which had disappeared in a few days under mild treatment. Two weeks later he had been rejected for life insurance because of diabetes. The latter had permanently disappeared in about six months. The fifth case was a woman of forty-one years, who had laryngitis and a superficial ulceration on the left arytenoid cartilage, and had been found to have diabetes. No tubercle bacilli had been found.

Dr. Freudenthal said that these ulcerations occurring in diabetics had not presented any characteristic appearance or location. He had not been able to find any literature on the subject.

An opportunity having been given for further discussion on the paper presented at the last meeting by Dr. Beaman Douglass, entitled

"A Study of the Galvano-Cautery in the Nose," Dr. Douglass closed the discussion. He said that he had approached the study of this subject from a biased standpoint because his clinical study had led him to believe that it was a dangerous procedure. Notwithstanding this his microscopical studies had compelled him to turn and say a good word for the galvano-cautery. If used on certain parts, and in the manner described in his paper, he thought the galvano-cautery would always have a useful function in nasal surgery. In selected cases it was apparently the best means at our command. The dangers had been clearly pointed out in his paper.

The Use of the Suprarenal Extract in Diseases of the Nose.

Dr. W. H. Bates read this paper. He stated that in less than one minute after the application of this extract to the inflamed mucous membrane of the nose the mucous membrane would be markedly blanched. In no case had he failed to observe this blanching. The effect was usually temporary; in some cases after half an hour the parts would look as they had done before. A tolerance was not acquired by the daily use of the extract in the nose, and no secondary effect of increased congestion had been noted. The extract was not poisonous; in one case, once ounce had been swallowed without unpleasant result. He had used the extract in the treatment of diseases of the eye, ear, nose and throat for the past six years, employing it over fifteen thousand times, so that it could hardly be said to be still in the experimental stage. The aqueous solution should be prepared freshly when needed, otherwise it was likely to cause infection. Sterile solutions of the extract, when protected from daylight, had been found active after six months. He had experimented with boric acid, camphor, naphahalin, carbolic acid, glycerine, bichloride of mercury, nitrate of silver, protargol, ether, alcohol, sulphate of iron and other chemicals with the idea of preventing the extract from spoiling, but all of them had proved unsatisfactory for one reason or another. It had been observed that the addition of cocaine to the solution lessened its activity. The active principle of the suprarenal extract had been isolated, and found to be an alkaloid. This substance was more stable and apparently could be used for all the purposes in which the freshly prepared aqueous solutions had been found suitable. The extract had been found to increase the tone of all muscular tissue by direct action. The intravenous injection of the extract raised the blood pressure enormously, the peripheral vessels being strongly contracted. In the treatment of diseases of the nose and throat with this extract it should be remembered that

the remedy is simply a powerful astringent. The pain from some syphilitic and tubercular ulcers had been relieved by its astringent action. When used in conjunction with cocaine it produces a deeper anesthesia. The extract was also a valuable adjuvant to the use of cautery, such application giving more benefit and less reaction than if the extract were not employed. The healing of ulcers were promoted by it, and the time of healing very much shortened. Dr. H. L. Swain had found it possible to operate on the nose of a "bleeder" without much hemorrhage, owing to the powerful astringent action of the suprarenal extract. In controlling nasal hemorrhage, generally it was exceedingly useful. His method was to apply the extract until the parts were whitened, and then cocaine and the extract alternately until anesthesia was complete. In protracted operations when the parts became red or the patient complained of pain, the extract and cocaine were again used. The extract had no effect on the blood, neither preventing nor favoring coagulation. A case was reported in which the removal of polypi had been previously followed by severe and prolonged hemorrhage. When the extract had been used there had been absolutely no hemorrhage at the time of the operation or afterward. Through the courtesy of Dr. Moschocowitz he had learned of a case of urethritis in a hemophilic in which the extract controlled hemorrhage caused by the passage of sounds. For the treatment of acute rhinitis the internal administration of the extract had been found beneficial. For this purpose a five-grain tablet placed upon the tongue in three minutes gave relief. If taken into the stomach the result was uncertain because of the action of the gastric juice. Patients suffering from hay fever had been completely relieved by taking the dried extract internally at intervals of two or four hours. Other cases of hay fever were reported from the service of Dr. Meierhof, in which the extract had been used, for the most part with benefit. Dr. S. Solis Cohen had reported that he had used this remedy in six cases of hay fever, five of whom were cured. In all forms of tonsillitis relief would be afforded by the use of the extract, even in cases of peritonsillar abscess. He had known the voice to improve almost immediately in cases of laryngitis from the internal use of the extract. His conclusions were: (1) That suprarenal extract is a powerful astringent without objectionable properties; (2) the solution should be freshly prepared, and should not be mixed with any other substance; (3) in the treatment of diseases of the nose and throat other remedies should be used also. Since the secretion of the suprarenal gland is one of the fluids necessary to life, its administration as a drug causes less disturbance than

a foreign substance. This probably explained the marked benefit from its use in all cases of congestion of mucous membrane. In its sphere of activity there was no other substance, in the opinion of the speaker, which could take its place.

Dr. H. L. Swain said that he was personally deeply grateful to Dr. Bates for having given us such a useful remedy. His interest had been awakened by the statement made by Dr. Bates in his second paper that it acted by contracting the blood vessels, by virtue of its action on the muscle fibers in their walls, and he had at once begun an enthusiastic study of its properties. He could fully confirm what the reader of the paper had said about the best results being obtained from the pure aqueous extract unmixed with other substances. The active principle was found in the medulla of the fresh gland. Professor More, of Yale, boils this for five or ten minutes in diluted acetic acid, which thus precipitates the proteid products. This rendered the preparation less likely to spoil. After this boiling the extract is filtered and kept for an indefinite time sterile and active in an hermetically sealed glass tube. The change in color of the preparation was probably due to oxidation, and not to light as formerly supposed, for, when kept thus hermetically sealed, it did not undergo this change in color, but did so on exposure to the air. The speaker said that Schäffer, of London, England, had shown that even large quantities of the suprarenal extract, if taken by the mouth, failed to raise the blood pressure. He had hoped that better results would follow its hypodermic injection, but such had not been the case in experiments conducted in the physiological laboratory at Yale. However, when injected directly into the circulation the extract did raise the blood pressure enormously. In cases of shock following severe hemorrhage, where it was desired to raise the blood pressure, saline infusion had ordinarily been employed, but it had occurred to him that if a small quantity of this extract were introduced hypodermically it might take the place of saline infusion. The negative effect of its hypodermic use had spoiled this dream. He was now working on the idea that the use of suprarenal extract in the salt solution might give a better result. Regarding the stability of the preparation he would say that the aqueous extract could be boiled for a few minutes at a time for four or five times without destroying its activity, but if this boiling were repeated more frequently the activity of the preparation would be destroyed. He had had fairly good results from the glycerinated extract. From the foregoing experiments concerning the negative use of the extract internally he had come to the conclusion that the hay fever cases reported as relieved by this

remedy had not been solely benefitted by it. In these, frequently intensely neurotic subjects one has to carefully rule out mental effects. A patient benefitted last year was not this and *vice versa*. Some very good results do, however, occur. There was some question whether the major part of the active principle had been separated in the substance called epinephrin, for certainly ten times the effect could be secured from an aqueous extract, prepared as stated, as from a corresponding dose of epinephrin.

Dr. J. E. Newcomb spoke of the theories current regarding the function of the suprarenal gland. He was inclined to think that solutions which had been allowed to stand over night acted more powerfully than when used immediately after preparation. He had not been able to get a stronger aqueous extract than fifteen grains to the drachm. He had tried Vansant's mixture of camphor water, boric acid and suprarenal extract, and had found that it kept very well. It was also convenient to have the powder in capsules, each holding five grains. Dr. Muller, of Texas, seemed to think that the extract had a distinctly anesthetic action, but personally he had never noticed such an action, and the general opinion was that it was not anesthetic, although undoubtedly it prolonged the anesthetic action of cocaine and increased the astringent effect of the latter. In acute inflammations the alternate use of cocaine and suprarenal extract seemed to allow of a more thorough absorption of the cocaine. Dr. James Ewing had suggested that there was in the body a class of substances acting similarly to the suprarenal extract, one of these being protonuclein. Dr. Newcomb said that he was now experimenting with this substance.

Dr. Beaman Douglass said that since the introduction of cocaine no remedy had been brought into rhinological practice equal to suprarenal extract, and he was very proud to think that an American, Dr. Bates, had introduced this remedy. He had found last summer that the rhinologists in Vienna knew nothing practically about the suprarenal extract except at the Anatomical Institute, where experiments were being conducted under the direction of Professor Zuckerkandl. This investigator claimed that he was finding suprarenal glands in the epididymis and along the line of the spermatic cord. He had also found that when the suprarenal glands were diseased there was a compensatory hypertrophy of what was called the supernumerary glands. Some supernumerary glands had been found, it was said, in the mediastinum of the human being. It had been discovered by the same investigator that these accessory suprarenal glands had been found along the spermatic cord in about 50 per cent

of the rats examined in connection with this research. It had next been discovered that if the spermatic cord, the testicle and the suprarenal glands were removed the rats would die within twenty-four hours of acute gastritis and acute nephritis. These results had not been published. The speaker said that he had them from the professor by word of mouth and had seen some of the experiments. It would seem from the foregoing that the object of the suprarenal gland was to control the circulation. Dr. Douglass thought that one of the most important effects of the use of suprarenal extract would be the reduction in the number of cases of cocaine poisoning. He had found that he could produce toxic effects of cocaine by using the suprarenal extract after the cocaine, but if used before the cocaine it seemed to prevent the absorption of this substance, and so tended to diminish the danger of cocaine poisoning. In his experience boric acid had proved useful as a preservative of the aqueous extract of suprarenal gland. He employed a saturated solution of boric acid for making the aqueous extract. While he was willing to admit that it seemed irrational to expect any effect from the internal use of the suprarenal extract, he felt convinced that its action, when administered in this way, was undeniable, though inexplicable. Chronic and obstinate cases of hay fever were not suitable subjects for mental suggestion, and hence the remarks of Dr. Swain on this point seemed to him strained. He had seen two very severe cases of secondary hemorrhage following his early use of the suprarenal extract, and this had led him to suspect that the extract might be responsible for it. It was possible that these were only coincidences, but the fact should be placed on record. With these two exceptions his experience had not pointed to the use of suprarenal extract as productive of secondary hemorrhage. He would also call attention to the fact that he had seen more cases of sepsis since using the aqueous extract. This might be due to the use of a poor preparation or to the action of the gland on the cells, thus making their resistance to sepsis less. He had never found any other remedy of equal benefit in hay fever, whether used internally or locally. A letter was read from a physician who had long suffered from hay fever, and who had experienced immediate and marked benefit from the insufflation of the suprarenal extract in powder.

Dr. T. P. Berens spoke of the use of the suprarenal extract in minor plastic operations on the nose. He had prepared the extract by boiling a 10 per cent solution of cocaine with one part of the dried gland in ten parts of cocaine solution. After boiling for twenty minutes he had used the preparation. In three cases, in

which this had been used the operation had been bloodless, and the anesthesia thoroughly satisfactory. He had had only one case of sepsis in connection with the use of the extract, and that had been where a boric acid solution of the suprarenal extract, twenty-four hours old, had been used. He preferred to use the extract when only three or four hours old. For use at the patient's home he preferred the dried powder snuffed up the nose.

Dr. T. R. Chambers recalled a case of extraordinarily severe hemorrhage occurring after the use of the suprarenal extract. It was a case of hypertrophic rhinitis which had lasted for hours, and had recurred five days later so severely as to almost exsanguinate the patient.

Dr. Emil Mayer said that he had noted severe hemorrhage after the use of suprarenal extract in more than one case. He had used it more particularly in connection with operations with the electro-trephine. It had been his custom to employ the aqueous extract prepared the same day, and to which had been added some boric acid. It was true that the homorrhage had been beautifully controlled during operation, but he was positive that more cases of hemorrhage had occurred after its use than before. In all his cases the nose was invariably packed with iodoform gauze, and yet in spite of this precaution hemorrhage had taken place. It seemed to him that the moment a liquid spray of the extract was used in a case of active hemorrhage the extract would be washed out so rapidly as to be of no use. Reference was made to a case in which another physician had checked hemorrhage by the internal use of the suprarenal extract after removing laryngeal tonsils. He was glad that no one had advocated the use of suprarenal extract in the removal of adenoids, for, here the results might be disastrous.

Dr. R. C. Myles said that he had almost always used the powdered extract, and had found its action prompt and satisfactory. He had also used it in connection with cocaine. He could recall two cases of hemorrhage coming on a few hours after the use of the extract; nevertheless he considered the possibilities of this remedy very great, and such as to place it along side of cocaine for nose and throat work.

Dr. Bates, in closing the discussion, said that the addition of boric acid did not act as a preservative, and the addition of camphor disguised the odor of the extract and prevented one from determining when the extract was spoiling. Such a solution, when instilled into the eye, would cause an acute iritis. It could not be doubted that the internal use of the extract produced physiological

effects. If used hypodermically on cases of cardiac disease the effect of the remedy was immediately beneficial, and he had noted the same from the instillation of the extract into the eye. He had already reported such a case. Apparently the suprarenal extract had no effect on the normal eye. He had not had good results from the glycerinated preparation. He had been deeply interested in the cases of secondary hemorrhage reported. He had employed the suprarenal extract after adenoid operations, and had felt that it had stopped the hemorrhage.

ERRATA.

The microscopic examination of the cyst wall reported by Dr. Jonathan Wright in the proceedings of the Section of Laryngology of the New York Academy of Medicine, and which appeared in the January issue of THE LARYNGOSCOPE (page 32), refers to the case presented to the Section by Dr. Simpson.

THE LARYNGOLOGICAL SOCIETY OF LONDON.

Fifty-Second Ordinary Meeting, November 3, 1899.

F. DE HAVILLAND HALL, M.D., President, in the Chair.

WILLIAM HILL, M.D., LAMBERT LACK, M.D., } Secretaries.

Microscopical Section of a Growth (Lymphangioma?) Removed from the Right Ventricular Band of a Man aged Forty—Shown by Dr. FURNISS POTTER.

The specimen was brought before the notice of the Society because there was some doubt as to its nature, and also because, as far as the exhibitor knew, a growth on the ventricular band was not of common occurrence.

Mr. WAGGETT said he had been asked by Dr. Furniss Potter to suggest that this case might be referred to the Morbid Growths Committee as Dr. Potter had some doubt as to whether it was lymphongioma.

The suggestion was supported by the President and adopted.

Case of Enlargement of the Nose—Shown by Dr. WILLIAM HILL

A boy æt. eight, the subject of congenital syphilis, first came under observation as an out-patient a year ago with necrosis of the premaxilla and ulceration of the septum. Subsequently a large sequestrum was removed under an anesthetic. About a month ago signs of symmetrical periostitis of the nasal bones and of the nasal processes of the maxillary and frontal bones appeared. The enlargement and deformity of the nose had steadily increased; the swelling, which was very painful to touch, had now extended half way up the forehead; the usual depressions at the inner angles of the orbit had disappeared, and the cheeks were becoming puffy. There appeared to be no active destruction now going on in the septum, but there was present a condition of crusty rhinitis. The boy had been taking grey powder, but the condition was gradually getting worse, and the exhibitor asked whether any one present could suggest any local or constitutional treatment likely to arrest the morbid process; otherwise much destruction and deformity seemed to be inevitable.

A Case of Lateral Enlargement of the Nose—Shown by Dr. HILL.

The patient, a girl æt. eleven, had been under observation as a sufferer from atrophic rhinitis for more than a year. Owing, presumably, to retarded growth of the septum, the shape of the nose, with its now depressed bridge, was quite different from what it was formerly, and the patient had been gradually altering in appearance for two years. Within the last two or three months, however, a more rapid change had taken place. This consisted of a lateral widening of the nose; the nasal bones, instead of forming a bridge, have become markedly flattened out, and the nasal processes of the superior maxillæ were now widely separated and formed prominent ridges, rising above the level of the depressed and flattened nasal bones. The question asked was, could anything be done either to correct the present deformity or to arrest its progress?

Female Aged Twenty-four with Enlargement of the Nose—Shown by Dr. STCLAIR THOMSON.

This patient applies for relief for frontal and occipital headache and nasal obstruction. She states that her nose was always rather broad, but that lately it had increased. The bridge of the nose appears expanded on either side, the ridge of the nose is ill defined, and (apparently from distension of the skin) appears thin, and the capillary circulation in it is marked, while the alæ seems thickened.

She has cacosmia, but states that she cannot smell on the right side. Both nostrils are patent; there is no pus on either side, and no marked pathological change in the nose, except that the middle turbinal is enlarged and pushed inwards against the septum. A view has not been obtained of the post-nasal space.

Male Aged Fifteen with Enlargement of Nose—Shown by Dr. STCLAIR THOMSON.

In this case the nose is not only enlarged externally, but it is red and decidedly tender. The tenderness is slight over the lower wall of the frontal sinus, hardly perceptible over the center of both maxillary sinuses, but is increased over the nasal process of the superior maxilla, while it becomes very marked over the nasal bones and on pressure at the inner canthus of the eye on the region of the ethmoidal labyrinth.

The patient states that for twelve months the discharge from his nose has smelt badly both to himself and others.

Pus has been seen on the posterior wall of the cavum and on the floor of the right choana, as well as a slight amount in the left middle meatus.

Nasal Case for Diagnosis—Shown by Mr. ATWOOD THORNE.

The patient is a boy æt. twelve. Six weeks ago it was noticed that his nose was broader than usual, and since that time it has been getting gradually worse.

He has also had increasing difficulty in breathing through his nose.

There is a history of a blow three months ago, when his nose bled a good deal for an hour or two and then ceased.

He came to St. Mary's Hospital on November 3d, and was seen to have a broad nose with a depressed bridge. He could not breathe at all through either nostril. On examination both nostrils were found to be filled with hard, blood-slained masses. On clearing these away the septum was found to be thickened and ragged immediately within the columella, and beyond was a large perforation of the cartilaginous septum.

There is nothing in the boy to suggest tuberculosis.

There is nothing in the teeth or eyes to suggest hereditary syphilis, but he is the youngest child, and the mother had a miscarriage three and a half years after his birth.

Dr. WILLIAM HILL said: I think Dr. StClair Thomson's two cases are instances of perichondritis and periostitis of a more or less acute character, and we can dismiss, at any rate as a prime factor, the question of ethmoiditis, though secondarily the ethmoid region may be involved. I have had cases resembling them before in which I had thought I had excluded syphilis, but on more than one occasion they eventually turned out to be syphilitic; others were apparently of an erysipelatous nature.

In the female I cannot help thinking that there is perichondritis of the septum present owing to the thickness of septum, and if so that might explain the condition of the rest of the nose, because when you get perichondritis of the septum the inflammation often does spread to the adjacent structures; I cannot, however, throw any light on the etiology of the case.

Dr. SCANES SPICER said in the boy's case the bony and cartilaginous framework of the nose appeared quite normal and not hypertrophied, whereas the hyperplastic condition was confined to the soft tissues of the tip, dorsum and alæ, and appeared to be only of the skin and subcutaneous cellular tissue. The explanation of this seemed to him not clear in all cases. Doubtless sometimes this enlargement resulted from edema of an acute inflammation which did not completely subside. At others it was secondary to the congestion subsequent on systemic circulatory disorder. Reflex congestion from intra-nasal irritation might explain other cases; and sometimes,

as in this case, a stagnation of lymph-flow was suggested, although one could not determine the fact of blockage of lymph vessels.

Dr. F. DE HAVILLAND HALL: The first case reminds me of the case of a lady who consulted me some years ago, though in my case there was more swelling, redness and tenderness. In order to get a satisfactory examination I applied cocaine to the interior of the nostril. There was no change in the nose, and I sent her back to her medical adviser in the country. To my dismay I heard three weeks later that, a few days after I had seen her, acute mischief set up in her nose with the formation of an abscess and destruction of the bony framework, so that the bridge of the nose fell in. At the time there was very little more to be noticed than in the case we are discussing; it had been going on for some weeks, and seemed a chronic or subacute case, and I had no idea that such rapid mischief was in progress. I have been unable to satisfy myself of the final result, as the lady would never come near me again.

Sir FELIX SEMON: I have had the opportunity of seeing a good many similar cases, and in the majority I have satisfied myself that the origin of the enlargement was traumatic. It appears that often enough after a fall in early infancy, or after a blow during school-time, or a fall in the hunting-field, etc., an inflammation is set up, not only of the soft parts, but also of the perichondrium or periosteum, the acute symptoms of which (pain, obstruction, epistaxis) quickly subside. But later on it progresses very slowly and insidiously. So much is that the case that the patients often, when first asked about a history of traumatism, distinctly deny such; but on a subsequent occasion return with the statement that, on further thinking about the matter, they remember having had months or even years ago an injury to the nose. The best treatment I have always found in such cases consists in applications of ice-water externally and iodide of potassium internally.

Dr. DUNDAS GRANT: I share the diffidence which seems to usually possess the members of this Society with regard to these cases; personally I have a good deal to learn about them. With regard to the youth whose case was brought before us by Dr. StClair Thomson, I agree with Dr. Scanes Spicer that the condition is more than of vascular congestion from pressure, owing, I think, to the size of the medial turbinated bones; and I am of the opinion that a very considerable diminution will take place if the turbinated bones are removed. Very often early swelling is due to some skin disease affecting the lining of the vestibule, and I think that repeated small follicular abscesses will leave this enlargement.

With regard to the case of Dr. Hill, it is a very serious one indeed; the child seems to have been inoculated with some virulent form of suppurative disease, which has resulted in a chronic atrophic condition and cirrhotic contraction of the parts; afterwards this has resulted in the falling down of the soft tissues which bring with them the nasal bones, which do not seem to have acquired their attachment to the nasal processes of the superior maxilla, as they would do at a later period of life. I do not think it is necessary to assume a syphilitic condition in that case.

Dr. Fitzgerald Powell: To help clear up this matter I wish to ask Dr. StClair Thomson to tell us whether any cultures have been made from the nasal secretions, especially in the case of the boy. I think we must look further afield in the majority of such cases for the cause, and if sought for it will be found in certain blood dyscrasias such as tubercle, syphilis or perhaps septic infection. In traumatism, no doubt, we may have the exciting cause, the disease remaining latent until the blow or injury has been received. We know in septic, tubercular and other forms of osteitis, a blow or other injury is often the starting-point of the disease, which not infrequently runs a rapid course. In these nose cases tubercle or syphilis will, I think, generally be found at the base of the trouble, and not septic infection.

Dr. StClair Thomson, in replying, said: I am very glad to have raised a discussion, and I hope that members having similar cases will bring them before the Society. Firstly, I would say that no cultures have been made from either of my patients. While, no doubt, traumatism is a cause in a large number of cases, I hardly think it will explain all cases. Among my private patients such cases have occurred in middle-aged ladies, who do not seem likely to be exposed to traumatism; one was over fifty years of age, who was quite sure she had had no injury. Her nose was tender, shiny and red, and for this reason she had a dislike to going into society. I had another case in consultation in which the condition was in an advanced stage; the bone and skin were distended to such an extent as to cause superficial ulceration. It was seen by a general surgeon in consultation; he could give no opinion, and regarded the case as very obscure. The post-nasal space was perfectly clear. Under potassium iodide (up to 30 grs. three times a day for six weeks), given by a Manchester surgeon on the suspicion of syphilis, no improvement took place.

A Case of Laryngeal Growth (Anterior Commissure) in a Man with Altered Voice for over Thirty-five Years—Shown by Dr. HECTOR MACKENZIE.

The patient is a man æt. forty-eight. His voice has never been natural since the age of ten or twelve, when it suddenly altered and became weak and hoarse. Since then the voice has remained high-pitched, weak and more or less hoarse, but sometimes worse, sometimes better. He has noticed no difference recently.

He has suffered from a cough off and on since he was a boy. For the last six or seven years he easily gets out of breath on exertion. It was on account of the cough that the patient sought advice. He was found to have a slight degree of emphysema, together with some bronchial catarrh.

On examination of the larynx there was to be seen a flat, smooth, reddish growth projecting from the epiglottis immediately above the anterior commissure, and extending above the anterior fourth of the right vocal cord. The remainder of the larynx appeared healthy.

During the three months that the patient has been under observation the growth has not altered in size or appearance. From the appearance, shape, size and situation of the growth it is probably a fibroma.

I have brought the case forward especially with regard to the question of treatment.

The growth, as far as we can observe, produces no symptoms, unless we are to suppose thas it is the cause of the alteration of voice, in which case we must assume that the growth has been in existence for thirty-five years. Is this not one of those cases where the growth is best left alone, the patient being seen from time to time and surgical interference being employed only if required by increased size of the growth or by interference with the breathing.

I very much doubt whether it would be of any advantage to the patient to have a perfectly normal voice, seeing that he has reached the age of forty-eight with his present vocal peculiarities, even if it were possible to secure this by operation. What the man hopes from operation is to be cured of his shortness of breath, with which the growth has no casual relation.

The PRESIDENT: If I were the patient I would prefer to go to the grave with my voice in the present condition.

Dr. DUNDAS GRANT: Is it not worth while to have that growth removed? I think an attempt ought to be made. It is not always an easy place to get at with forceps, but the "seat of election" for operation by means of a snare. I have seen a case just like it where

it could not be removed intra-laryngeally, and the result of removal by means of thyrotomy was to restore the voice, though it is generally supposed that thyrotomy is attended with great risk of loss of voice.

Dr. SCANES SPICER: This particular growth seems an easy one to remove by snaring, since it appears free from and above the vocal cords; with no attachment below the anterior commissure, and with a constricted pedicle, removal would probably entirely cure the unpleasant hoarseness.

Mr. WAGGETT advised Dr. Mackenzie to remove it or some one else would.

Dr. HERBERT TILLEY thought that the growth might quite well be removed by intra-laryngeal forceps; he had recently thus treated a case at Golden Square Throat Hospital, and had found no difficulty with it. He felt bound to differ from Dr. Mackenzie's view of the treatment. The fact that the patient had had a bad voice for thirty years seemed to the speaker a powerful argument that it was time to endeavor to give the patient a good voice.

Dr. HECTOR MACKENZIE: I am very glad to have had the opinion of the members of the Society about this case. I had an opportunity this afternoon of seeing the man's elder brother, who confirmed what the patient had told me, that the change in the voice came on quite suddenly; he said he could remember the very place where his brother lost his voice, namely, a certain field in Oldham. This is rather difficult to explain if the cause of the alteration of voice is the presence of the tumor. Mr. Waggett says if one person does not remove the growth some one else will do it. I believe the man himself wants it done, because he thinks he will be cured of his shortness of breath. Unless I felt it was the best thing for the man I should neither do it nor advise it to be done. I quite agree with you, Mr. President, that as the man has gone about all these years—nearly forty years—with very little inconvenience resulting from the tumor, it is better to allow things to take their ordinary course.

[The President subsequently had an opportunity of re-examining Dr. Hector Mackenzie's patient, and agreed with those members who advocated the removal of the growth.]

A Case of Epithelioma of the Left Ary-Epiglottic Fold in a Man Aged Sixty-five—Shown by Mr. WYATT WINGRAVE.

The only symptom was painful deglutition of seven months' duration. Portions were removed by snare and Grant's forceps, and proved to be squamous epithelioma.

During the last two months he had lost weight, and the growth showed signs of extension.

Mr. BUTLIN: I could not quite convince myself how far the growth extends anteriorly and posteriorly, but it seems to me from most points of view a good case for operation in that situation, though such operations are very rarely successful. The best way to do it is to open through the thyroid cartilage, turn back the two halves of the larynx to obtain a better exposure, and then deal with the growth. I have performed infra-hyoid laryngotomy for a growth not quite so large as this one under discussion; it was not a great success; there was very little room to get at it. I have removed very few growths from this situation, but such as I have done I have exposed from the front.

Male with Unusual Indrawing of the Ale Nasi—Shown by Mr. RICHARD LAKE.

This case was shown simply as a curiosity.

Dr. SCANES SPICER: The stenosis of nose from alar collapse is so extreme in this case that he would probably derive comfort from wearing tubes to keep nostrils open.

Mr. LAKE: The patient wears Schmidt's dilators, and derives great benefit from their use.

Dr. SCANES SPICER: He wants nothing more than small pieces of ordinary drainage-tube, which fulfil every indication and do not irritate.

Mr. WAGGETT: Mr. Stewart asked me to draw your attention to the fact that he had a similar case which was shown to the Society, which perhaps will be remembered, and that he made use of an apparatus with a not very favorable result.

Dr. STCLAIR THOMSON: The man is a neurotic subject; by manipulating the speculum, though I gave him a good deal of space and could see right through into the nose, he was still breathless. He has cardiac disease, and I have noticed that people with heart trouble, whose nasal respiration is deficient, are very neurotic.

A Case of New Growth in the Vocal Cord, probably Cystic in Nature—Shown by Dr. DUNDAS GRANT.

Man æt. twenty-six, omnibus conductor, was brought under my notice by Dr. Mackintosh on account of the peculiar condition of his left vocal cord, of which he has made a very faithful portrait. The cord is shaped very much as if a small lemon-seed had been let into the middle of its vibrating part. The mucous membrane over the swelling is perfectly normal in color and luster, and the mobility of the

cord is unimpaired; a few blood vessels ramifying on the surface are just visible. There has been no pain, and the only symptom has been a pronounced degree of hoarseness each winter for four years, coming on gradually, lasting for the winter, and then gradually diminishing, but not wholly going, as summer comes on. The growth appeared to me to be in the substance of the cord rather than on its surface, and its presence, no doubt, gave rise to a chronic laryngitis under unfavorable climatic conditions, this retrogressing under favorable ones. Its rounded contour suggests that it is a cyst.

I propose making an incision, or at least a puncture, in the first instance, subsequently applying an electrical or chemical cautery.

Dr. DUNDAS GRANT: This growth has increased in size since I first saw it and has become more prominent, It has been suggested by Dr. Tilley that it would be better to remove it with my own forceps than making an incision as I proposed. Having again examined the case, I shall act on the suggestion.

Dr. HERBERT TILLEY advised removal by means of an intra-laryngeal forceps; the growth was freely moveable, and the treatment suggested would be much easier than the endeavor to puncture it and apply chromic acid to its interior.

Dr. STCLAIR THOMSON: Are cystic growths common? I thought I had a similar growth once, but when removed and put under the microscope it turned out to be a case of edematous fibroma.

Dr. SCANES SPICER: It also struck me as being a fibroma.

Mr. WAGGETT had operated on a case very similar in appearance to that now shown. Microscopic examination proved it to be a cyst lined with columno-squamous epithelium.

Dr. DUNDAS GRANT, in replying, said: I hope to bring this growth (be it edematous fibroma or cystic) before the Society on another occasion. My reason for thinking it cystic was that it was deeply buried in the substance of the cord, whereas fibromatous growths are usually outgrowths from the surface of the cord.

A Case of Fibro-Papilloma of the Vocal Cord causing Hoarseness; Restoration of Voice after Incomplete Removal of the Growth —Shown by Dr. DUNDAS GRANT.

A teacher æt. nineteen came under my care last September on account of extreme hoarseness of about two months' duration, which had come on after an attack of bronchitis and influenza. The laryngoscope revealed a pink nodule of the size of a large pin's head on the edge of the left vocal cord at the junction of the anterior and middle thirds, and a much smaller one immediately opposite it on the right cord.

By means of my laryngeal cutting-forceps I succeeded in at once effecting a somewhat incomplete removal of the growth, which Mr. Wingrave considered to be a fibro-papilloma. The voice, however, was so well restored that I have not deemed it justifiable or requisite to carry out any further surgical treatment.

Case of Sarcoma of the Post-Nasal Space—Shown by Mr. WAGGETT.

A young woman æt. thirty, who six months previously had begun to notice nasal obstruction and also the formation of a lump in the neck. Some pain was experienced at the back of the neck, and otorrhea on the left side had recently developed without pain.

Examination showed infiltration of the left lateral and posterior walls of the naso-pharynx with a firm growth of pinkish white color, ulcerated in parts. A large secondary growth fixed to the deep structures was present beneath the upper quarter of the left sterno-mastoid muscle. The primary growth had descended almost to the level of the palate. The nasal fossæ were not involved.

Dr. BOND: This is a very grave case, and it is evident than an operation will either sooner or later be required to relieve the girl. I think that an early attempt should be made, that the palate should be split, and the growth thoroughly examined before deciding what should be done further. It is possible the whole mass in the naso-pharynx might be snared and scraped away and the site cauterized; one cannot tell before exploration, but the patient should have the benefit of the doubt, and an attempt be made to either cure or relieve her. I should recommend a preliminary laryngotomy, and then a few days later, if the last operation was a success, an attempt should be made to remove the glands. It is within the bounds of possibility that the girl can be cured; she ought to have her chance. My own argument is that something in any case must be done.

Dr. SCANES SPICER: I have had such a case under treatment during the last two years, and which has up to now been a great success. The patient was a gentleman aged sixty-five, with almost complete nasal obstruction on left side with septal exostosis and deflection, hypertrophied inferior and middle turbinated bodies, and left nasal cavity blocked with growths. These were thoroughly removed in December, 1897, and the nose rectified. The growths were myxomatous and fibromatous, and presented no evidence of malignancy. The nose was quite clear for some months, but there was an undue amount of mucous secretions and post-nasal irritation leading to hawking. Towards the end of 1898 the passage

seemed to be narrowing again at the back, though no growth whatever was to be seen in the nose or naso-pharynx. In February, 1899, owing to increased stuffiness, the patient again sought advice and complained of a lump and tenderness externally, but deep behind ramus of lower jaw. I then suggested that Mr. Butlin should be asked to see the case, as it looked as if it was a case of malignant disease in an early stage, and that an external operation would be required. The patient was examined under an anesthetic, and a portion of swollen lump in naso-pharynx removed for examination, and found by Mr. Butlin to be sarcomatous. The patient thereupon agreed to extirpation of the growth internally and externally at two operations. Mr. Butlin operated on the internal mass after dividing soft and partly the hard palate. The patient was weak, and made but a tardy recovery from the first operation, and it was decided to defer the second, at all events for some time until he was stronger. The cervical gland mass did not appear to increase in size or to spread. Arsenic was tried, but was not tolerated. The patient went to the Riviera for some weeks, and later in the summer to Switzerland. In the Engadine he consulted Dr. Bernhard, of Samaden, who thought it necessary there and then (September, 1899) to excise the enlarged masses in the neck; pain was a prominent symptom, and the possibility of there being deep suppuration in a gland or glands had been held throughout, though it was considered probable that the neck growth was also sarcomatous. Dr. Bernhard's expert declared the tumor removed from the neck to be glands affected with chronic lymphadenitis with suppurative foci and to be free from malignancy or tubercle. The patient left the Engadine within three weeks of the operation, and now, save a slight fistulous track over clavicle, is quite well. The practical lessons to be derived from this case appears to be that it is almost impossible to form an exact and complete opinion of such a case as this from the results of a histological examination of portions removed; that post-nasal sarcomata should be removed as early and as thoroughly as possible; and that secondary enlargements in the cervical glands outside are not necessarily malignant.

Dr. DE HAVILLAND HALL: I remember one case in which a growth was mistaken for adenoids, and an operation performed, but which later was found to be a case of sarcoma.

Mr. ATWOOD THORNE: I have seen a case in hospital practice which was taken to be adenoids, and was operated on as such. The mass recurred, was found to be sarcomatous, and did not admit of removal.

Mr. WAGGETT: I only have to say that these cases appear to be much more common than the scanty literature would lead one to suppose. I have seen four cases during the present year, in two of which an erroneous diagnosis was at first made. I shall attempt to carry out the suggestions made by Dr. Spicer and Dr. Bond.

Case of Laryngeal Perichondritis in a Man of Twenty-six, the Subject of Pulmonary Tuberculosis—Shown by Dr. S. SPICER.

The exhibitor called attention to the confinement of the disease to the right half of the larynx, to the considerable induration over the right half of the thyroid and cricoid cartilages, to the displacement and tilting of the larynx over to the left, and to the marked edematous infiltration of the right side of larynx on laryngoscopy.

Extra-Laryngeal (?) Malignant Growth—Shown by Mr. WAGGETT for Mr. W. R. H. STEWART.

A woman of fifty-six, the subject of chronic throat symptoms, for eighteen months had suffered pain in the throat and left ear.

Careful examinations with the mirrors early in July had revealed no disease, the patient's note-book bearing the remark that the movements of the cords were normal. Paresis of the left vocal cord was noted in September, and early in October edema of the left arytenoid region developed, partly hiding the paretic cord. A plaque, white in color and resembling in appearance the surface of a furred tongue, was now seen on the posterior pharyngeal wall on the left side and close to the arytenoid.

Digital examination revealed the presence of a hard nodular infiltration on the left linguo-epiglottic fold.

The case was regarded as malignant and inoperable, though no glandular enlargement was detected. Consequently no microscopic investigation had been made.

The PRESIDENT: This case is one of three—either tubercular, syphilitic or malignant. Sir Felix Semon seemed in favor of syphilitic, and he put malignant last, though I should put it first.

Dr. DUNDAS GRANT: I should consider it a case of epithelioma of the larynx and pharynx.

Mr. WAGGETT said that iodide of potassium had been used in this case.

Mr. HILL: The diagnosis could readily be cleared up by snipping a bit off for examination. This, assuming the case to be operable, ought to be done at once, with a view to prompt surgical measures.

Dr. LAMBERT LACK: I should advise that the growth be not touched in any way. The diagnosis seemed quite certain, and the tumor was quite inoperable.

MEETING OF THE CHICAGO LARYNGOLOGICAL AND CLIMATOLOGICAL SOCIETY.

Held December 29, 1899.

REPORTED BY EDWIN PYNCHON, M.D.

The President, Dr. E. Fletcher Ingals, in the chair.

Dr. John A. Robison read a paper entitled:

The Home Treatment of Consumption, in which he arraigned the medical profession for not properly educating tubercular patient as to the importance of baths, outdoor exercise, etc., as being valuable adjuncts to the medical treatment. Without making any suggestions regarding the latter he briefly outlined a series of practical hygienic and dietetic suggestions whereby patients can be treated at home quite as well as through any change of climate, involving an expensive journey.

Dr. Klebs mentioned the value of regular outdoor exercise when possible. He thought it desirable that physicians should see patients at least once a day, and that it is better for the physician to make the visit instead of the patient so doing.

Dr. Casselberry: Exercise with a moderate amount of fever is permissible. In the Western mountain regions patients can exercise with an excess temperature of two degrees. When over 101½° or 102° it is better to avoid exercise. Generally speaking, the moral effect of confinement is bad. While walking is the best exercise a fair substitute is to rest for awhile outdoors in a steamer chair well bundled. For walking as an exercise it is best to prescribe a definite distance twice daily—from three blocks at first up to three miles a day, meantime practicing deep respiration. Cold baths are valuable but should be ordered at a specific temperature, ranging from 60° down to 50°, the temperature of the bath room meantime being from 70° to 80°. The patient should immerse at once, and apply vigorous rubbing for thirty seconds, and then go into a warm room and use a crash towel. Delicate patients should begin with a wet crash towel instead of the bath. Alcohol is not a tonic but is a good appetizer, hence wine and beer with meals are often beneficial. Generally speaking, light underwear is better than heavy, though it can wisely be changed with change of temperature.

DR. ROBISON, in closing, said that his paper was presented chiefly to provoke discussion. He would favor the idea of furnishing patients with a printed sheet of instructions. Forced feeding by use of stomach tube has proven beneficial, thereby showing that the stomach can digest all that is eaten, and that the trouble is wholly a loss of appetite.

The next item on the program was a general discussion on

The Influence of Climate in the Treatment of Laryngeal Tuberculosis.

DR. INGALS did not consider the climatic treatment in this condition of as much value as in the treatment of general tuberculosis. Patients with laryngeal tuberculosis do poorly in high altitudes. Dust is not as harmful as is rarity. A mild winter is of most value, in fact a place both warm and dry as Phœnix, Ariz. The greatest danger is in painful deglutition as the patient does not eat well, and the greatest benefit comes from improvement of the general health.

DR. CASSELBERRY favored the Rocky Mountain district, particularly Colorado, where, to owing to the clearness of the atmosphere, the sun seems to give more life and heat, and where the winds are less annoying, and the air freeer from dust, than in Arizona. Patients are, therefore, more out-of-doors without having to be driven out. He had only seen two cases of healed laryngeal tuberculosis, both of whom had lived in the far West. By early examinations laryngeal complications of tubercular cases will often be found before any laryngeal inconvenience is experienced. He does not think altitude is as detrimental to these cases as is the alkaline dust. Success depends upon early treatment and the bad cases are all fatal.

DR. KLEBS: Any climate that benefits pulmonary tuberculosis benefits laryngeal tuberculosis. There is no climate which has a specifically beneficial effect. The change of habits and the out-of-door life are the principal causes of benefit. The surroundings should be cheerful.

DR. KLEBS reported a case of tumor of the larynx which he regarded as a fibrous cyst.

DR. CASSELBERRY reported a similar case, seen several years ago, upon which a hasty tracheotomy had to be done. The whole cyst was removed with a hot snare, the fluid escaping during the operation so only the cyst walls were secured.

Dr. Freer exhibited a post-nasal syringe tip made from a straightened hard rubber Eustachian catheter with the end stopped with sealing wax and three very small openings made near the end. With this tip, used with a fountain syringe, he had been successful in having ozena crusts removed and the treatment of atrophic rhinitis made more easy and satisfactory.

Dr. Pynchon presented the following improved instruments:

a. A Nasal Septometer[1].
b. An Adenoid Curette[2].
c. A Nasal Trephine and Guard[3].
d. A curved Tonsillotome.
e. Nasal saws curved on the flat.
f. A spring tonsil forceps.
g. A Head-band and mirror.
h. A cautery handle.
i. An ear extension for a powder blower.
j. A post-nasal spray tip.
k. Nasal splints of sheet hard rubber.
l. An ear tip for auscultation tube.
m. An oto-pneumatic masseur.

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SAN FRANCISCO EYE, EAR, NOSE AND THROAT SURGEONS' SOCIETY.

Meeting, December 21, 1899.

The President, Dr. W. A. MARTIN, in the chair.

Dr. SAMPSON TRASK presented a case of laryngeal angioma, in a healthy man of twenty-eight years. The larynx was otherwise normal, and the growth situated in the most vascular region. The color is dark blue (as seen by reflected light.) The surface is lobulated; the attachment is by a broad base, clear of the vocal cords and between the arytenoids. It projects well into the lumen during full inspiration, and beyond the arytenoids (as a dark blue line) posteriorly, during phonation. There is no voice change. The growth seems slightly resistant to the probe. There are some varicose veins in the left leg dating back many years. Dr. Trask looked upon this growth as being probably a simple varix, varicose veins, or veins possibly containing a clot, and therefore a hemangioma. The cause could be ascribed to a tendency to varicosity and wrong use of the voice during congestion, and when the parts were in a relaxed condition. Angiomata within the larynx are so rare that such clinical observers as Solis Cohen of this country and Sir Morell Mckenzie (whose observations extended for many years pretty much over the civilized world) report never having seen a case of it. Franke Bosworth dismisses the subject in a single paragraph. Lennox Browne's single case (operated on in 1891) is described as "a small, round, smooth growth of pink color, situated at the anterior insertion of the vocal cords." There was hoarseness and history of recent inflammation. Grunwald, of Munich, reports a case in his "Atlas." As in Mr. Browne's case, the true nature of the growth was made out by histological examination.

In Mr. Browne's case it was a thrombosed angioma. In Dr. Grunwald's the growth sprang from a broad base in the center of the inter-arytenoid space, "the surface was a bluish-red, covered with nodules." These growths were found in men aged respectively forty and forty-eight years.

Dr. TRASK presented also a case of spontaneous hemorrhage in left lower eyelid. The patient is a seamstress, aged twenty-two, and quite anemic.

One evening before retiring, without known cause a discoloration of the left lower eyelid came on. She first noticed a slight sensation in the orbital region, which, upon examination in the mirror was seen to be puffed, but not over sensitive. The following morning the swelling had increased, and the discoloration was first discovered. Dr. Trask saw it four days later. There was then very little swelling, and no abrasion or bruised appearance, only as now, marked discoloration affecting pretty much all the sub-cellular tissue of the lower eyelid. All form of traumatism is denied. The patient is physically weak, belongs to the overworked class. There is no history of other hemorrhages. The menstrual flow lasts a week and is of a light color. The blood coagulation time experimented with to-night shows it prolonged.

Dr. PHILIP recalled a case of a patient, aged seventy years, who had a temporal artery like a whip cord and who had a sudden hemmorrhage in nearly the same place as in Dr. Trask's case. There had been no exertion or injury.

DISCUSSION.

Dr. COHN believed this merely a case of accidental or intentional traumatism.

Dr. OVEREND had had a somewhat similar case about ten years ago, and he had concluded to attribute it to the logical result of the chlorosis present; there was a chemotic condition of the conjunctiva also.

Dr. EATON suggested that in Dr. Trask's case there may have been a nocturnal epileptic seizure of vomiting.

In closing the discussion, Dr. TRASK said: "Spontaneous hemorrhage in the sense that it is causeless is probably a misnomer. Occurring without discoverable cause in any situation, it is a rarity in pathology. There is usually a former change in the blood, as in scorbutus or hemophilia, and who can say there is not an adequate, coöperating local cause also? Else why does it occur locally and not generally? Fuchs reports spontaneous hemorrhage within the orbit as 'an extremely rare occurrence,' and mentions whooping cough as a cause. We may exclude orbital hemorrhage by the non-involvement of the conjunctiva or slerotic, which you have seen are clear. In regard to what has been said this evening as to possible injury during the night, I would state again that the condition began at bedtime. I shall examine the heart, blood and blood vessels."

January Meeting.

The President, Dr. W. A. MARTIN, in the chair.

Dr. MARTIN presented a man with an extensive ear lesion and said: "The case I show you this evening is supplementary to the one shown by Dr. Pischl at our last meeting. If you remember, in Dr. Pischl's case there was a perforation or fistulous opening in the upper and posterior wall of the auditory canal about 5 m.m. from the annulus and supposed to lead to the mastoid antrum. In the case I show you this evening, the upper and posterior wall of the canal is missing and the attic and mastoid antrum are merged in one large cavity—a Stacke operation performed by nature. The trouble commenced before Mr. R.'s remembrance. He is now twenty-two. I saw him first nearly a year since. At that time this cavity was filled with detritus analogous to cholesteatoma, but easily removed by the use of the syringe, and with a little treatment was brought to its present condition. Running across and cutting the cavity in two unequal parts—a larger upper division and a smaller lower one—is a band of tissue. This, I thought, corresponded to the annulus tympanicus, and for the sake of rendering the cavity more easy to clean, I cut it through with scissors, expecting it to retract: but it did nothing of the kind, but promptly adjusted itself and grew together again. It is extremely sensitive, as is the whole cavity. When wiping out the cavity with a cotton mop, the patient complains of an extremely unpleasant sensation, not altogether one of pain. It is also apparent from the twitching and spasms of the facial muscles that the facial nerve is close to the surface and easily irritated, although, aside from a slight drawing of the mouth, one could not say that there was any serious lesion of this nerve. The patient, so far as I have been able to test him, is absolutely deaf in this ear.

"The left ear, when I saw him, was filled with granulations and he was wearing a patent ear drum. I had him discard this for a cotton drum dipped in an antiseptic oil, and with a little treatment have destroyed the granulations, and you see quite a large portion of the m. t. has formed about the head of the hammer, which is still present. His hearing in this ear is, without artificial drum, watch on contact (normal one meter), and low conversational voice at one meter: with the drum in place, watch is heard at twenty-five centimeters and low conversational voice at four meters, so that he can follow his occupation, that of clerk in a lawyer's office, with comfort."

The annual election of officers being in order, was held, and resulted as follows: President, Dr. Henry L. Wagner; first vice-president, Dr. F. B. Eaton; second vice-president, Dr. George W. Merritt; secretary, Dr. R. L. Cox; treasurer, Dr. Kaspar Pischl.

THE WESTERN OPHTHALMOLOGIC AND OTO-LARYNGOLOGIC ASSOCIATION.

The attention of our American readers, and particularly those in the Western States, is specially directed to the next meeting of this association, which will occur in St. Louis, April 5th, 6th and 7th.

The programme and arrangement committees are moving actively in the interests of the proposed assembly, and already assurances have been received from a sufficient number to warrant the belief that there will be a larger attendance and a more uniformly high class of papers presented than at any previous gathering.

The association is in a flourishing condition, its membership has steadily increased, and it now numbers upon its rolls many of the most representative ophthalmologists, otologists and laryngologists of the Central and Western states.

The central location of St. Louis makes attendance easier to a larger body of physicians interested in ophthalmology and oto-laryngology than would be possible if the meeting place was in a city less conveniently situated. The sessions will be held in the ordinary of the Planters Hotel.

A museum of specimens is projected, to which all members will be invited to contribute. In addition there will be a therapeutic and instrumental exhibit that cannot but prove valuable to those who practice where they have not the opportunity to examine new instruments and appliances before purchasing.

In a later issue we will publish the scientific and entertainment programme. F. C. E.

AUTOSCOPY.

In the year 1895 Alfred Kirstein, of Berlin, opened up a new way for the examination and treatment of the larynx and trachea by teaching that the interior of the air-passages may be viewed directly, without the aid of the mirror or other optical appliance, thus deviating from tradition and the methods in vogue.

The results of his observations and the facts developed were outlined in a series of articles entitled "Autoscopy of the Air-Passages," published during the year 1895.

In 1896 the author issued in book form, under the title "Autoscopy of the Larynx and Trachea," a detailed description of the new method and the indications for its employment.

While this method will not replace the old laryngoscopic methods, Dr. Kirstein has, nevertheless, made an important addition to the technical resources of the laryngologist.

We wish, however, to call attention to the fact that the name which the author has chosen to apply to this method is a misnomer and one likely to be misinterpreted.

The word autoscopy could scarcely have come from any other source than the two Greek words *autos* and *skopeein*, which, taken together, mean a self-examination. This is clearly not the sense in which it is here used.

In coining a word special attention should be directed toward making it distinctive, and such that its etymology will furnish a key to its meaning.

In Vol. I. International Clinics, the author has an interesting monograph under the title "Autoscopy of the Larynx and Trachea, and its Relations to Esophagoscopy," a review of which will be found in our Abstract Department. R. M. R.

ABSTRACTS AND BIBLIOGRAPHY.

Arranged and Edited by

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with the collaboration of the

EDITORIAL STAFF.

It is our purpose to furnish in this Department a complete and reliable review of the world's current literature of Rhinology, Laryngology and Otology.
Authors noting an omission of their papers will confer a favor by informing the Editor.

I. NOSE.

Regional Minor Surgery—(The Ear and Nose)—Geo. G. Van Schaick—*Internat. Journ. Surg.*, November, 1899.

The article is written for the general surgeon. When there is considerable cominution in nasal fracture, the author advises that a long sterilized pin be driven transversely through the nose, under the broken bones, and supported at the proper distance by means of small rolls of gauze bandage placed upon the closed eyelids.

Eaton.

Some Abuses in Nasal Surgery—W. S. Laton. Minneapolis, Minn., *N. C. Medical Journal*, October 20, 1899.

A plea for greater conservatism in nasal surgery and more care in its application. In one case reported, the patient's turbinals had been repeatedly cauterized when the cause was really a deformed septum. The remaining cases described illustrate the advantages of surgery in rhinology. Scheppegrell.

The Veil as a Cause of Nasal Erythema—O. Rosenbach—*Berl. Klin. Wochenschr.*, October 9, 1899.

The author has found that in a number of cases the ordinary face veil worn by ladies has been the cause of a hyperemia of the skin of the nose. This is especially apt to be the case in cold and windy weather. The tighter the veil is drawn the worse matters are. The condition is particularly observable in those possessing a delicate pink and white complexion.

If the cause is discovered in time and the use of the veil abandoned, the redness disappears, but if the minute vessels of the skin are well dilated, the condition is generally more or less permanent.

The author advises that if the patient cannot avoid exposure to cold winds, etc., that instead of wearing a veil the person should first rub a little vaseline or some other unguent over the exposed nose and then dust on powdered starch or any harmless face powder. Vittum.

Coryza—MAX NASSANER—*The Penn. Med. Journ.*, October, 1899.

To abort an incipient attack of coryza, a weak, pale, pink solution of potassium permanganate is recommended. The nostrils are to be well rinsed with the solution. After drying the nostrils, a small plug of cotton is inserted far back in each side of the nose, and the cavities are then filled with the solution, the head being held back. The plug saturated with the solution is left in position for an hour, when it is to be expelled by blowing the nose.

E. D. LEDERMAN.

Hay Fever and Acute Coryza—B. J. WETHERBY, Wilkes-Barre—*Medical Council*, November, 1899.

The author calls attention to a new and very serviceable application of heroin, namely, its use in the treatment of hay fever and coryza. In these conditions he recommends the following formula:

Heroin	1 grain
Atropiæ Sulph	1/25 grain
Caffeine Cit	15 grains
Salophen	75 grains

M. Ft. Caps No. xv.

In the author's own case of hay fever one capsule was sufficient to relieve the sneezing and the profuse nasal secretion, and four capsules a day kept him perfectly comfortable. Since this favorable experience Dr. Wetherby has prescribed the same treatment in a number of cases of coryza and hay fever with equally positive results in every instance. He believes that by its use we can promise immediate relief to the large army of coryza patients so common at this season of atmospheric changes.

A Peculiar Case of Nasal Obstruction—LIM BOON KENG, Singapore—*Scottish Med. and Surg. Journ.*, October, 1899.

This somewhat unique case is of interest. While the patient was bathing a leech slipped into one of his nostrils; he had been unable to dislodge it, but found that when some fresh water was applied to the nostril, the leech elongated itself and moved about. When seen by Dr. Keng three months had elapsed since the leech had entered, and the patient had all the appearance of a man who had lost a quantity of blood. A pair of artery forceps was applied to the leech's tail and a few drops of chloroform were inhaled which caused the animal to drop out.

A. LOGAN TURNER.

Muco-Fibrous Polypus—Proceedings of Toronto Clinical Society—D. J. GIBB WISHART—*Canadian Practitioner and Review*, December, 1899.

The patient was a boy eight years of age. Numerous previous attempts had been made to clear the nose of polypi before the child was entered in the Children's Hospital. Under chloroform and through the left anterior naris a muco-fibrous polypus three and one-

half inches in length was removed with the cold wire snare. The polyp was attached to the middle turbinated bone, in the usual situation, and no others were discovered, although the boy was kept under observation for four months. The boy's face is peculiar in appearance owing to a lack of development in the ethmoid bone and a distinct sinking in the region of the frontal sinus. The palate is highly arched and the incisor teeth overlap at their inner inferior angles. There is double dislocation of the lens. Heriditary syphilis was suspected, but not definitely marked. GIBB WISHART.

Essential Anosmia—REUTER, Bad Ems—*Archiv. für Laryngologie*, Band ix, Heft 3, 1899.

The author divides anosmia into three classes:

1. That accompanying total extirpation of genuine nasal polypi.
2. That accompanying chronic ethmoiditis.
3. That accompanying ozena,

Under the first heading he refers to those cases where anosmia remains strongly marked in spite of the fact that the olfactory fissure has been cleared out as thoroughly as possible. In these cases where the fissure is to all appearances perfectly open and pervious, he thinks that the anosmia is perhaps deue to the fact that it is impossible to remove every vestige of the growth when situated very high up, and hence the passage may still be somewhat obstructed although it does not appear to be so. One observation made by the author deserves notice. He thinks he has observed in his cases that whenever the anosmia persists after a thorough removal of polypi in that case the polypi will certainly recur. The reverse also holds true. This will be a valuable sign for the practitioner if further observation proves it true.

In the case of anosmia accompanying ethmoiditis it should be remembered that the sensitive epithelium extends only over the superior turbinals and the neighboring portion of the septum, so that the anterior ethmoidal cells alone are affected that simply to clear the way to the olfactory region would restore the sense of smell, and this seems to be the fact according to clinical observation.

The most frequent form of essential anosmia seems to be that which accompanies ozena. In many cases it is found that if the nostril be very thoroughly cleared of crusts and the way to the olfactory fissure laid open, the sense of smell will return. On the other hand in advanced cases of ozena the complete loss of smell makes it probable that the tissues of the olfactory region have shared in the atrophic changes, and the resulting organic condition is permanent. VITTUM.

The Ethmoid Bone and Nasal Catarrh—ARTHUR F. SUMNER—*Journ. of Med. et Science*, November, 1899.

Attention is called to the anatomy of the ethmoid bone in an curtailed manner. The opening of the cells and the cells themselves are so small that in an acute inflammation of this region, drainage is

imperfectly accomplished. This state of affairs accounts for the frontal headaches and fullness of the nose in an ordinary cold.

In chronic purulent conditions, the flow of pus is frequently an aid to diagnosis. In disease of the anterior cells, surgical treatment should be applied, if antiseptic measures are not successful. The author does not believe that surgery offers much relief where chronic suppurative disease of the posterior cells exist. He thinks that in the future, electrolysis will be the means of resolving hyperplasias of the middle turbinal in a safe and efficient manner.

LEDERMAN.

The Purulent Diseases of the Nasal Cavities and their Importance to the General Practitioner—JULIUS VEIS—*Weiner Klin. Rundschau*, Skptember 3, and September 10, 1899.

This paper is a very good résumé of the symptoms, course, diagnosis, etc., of the diseases under consideration. Nothing new is given, and the paper professes to be only a hint to the general practitioner. The author advises that in all cases recourse be had to the endonasal operations, where this is possible. VITTUM.

A Case of Apparent Congenital Eburnification of the Superior Maxillary Bone—Operation and Cure—CARL SEILER—*Internat. Journ. Surg.*, November, 1899.

An unmarried woman, aged twenty-three, on examination was found to have complete stenosis of both nasal cavities, both anteriorly and posteriorly, caused by a bony growth. The left antrum was completely obliterated, and the left eye protruded. The patient had never breathed through the nose nor had any sense of smell. The author concluded that probably a congenital bony growth was the cause, and operated. An incision was made, commencing at the inner canthus of the left eye, down the side of the nose, around the ali nasi, across the lip to the columnar cartilage, and then down through the middle of the upper lip. The whole side of the face was laid bare, the flap being pinned to the ear. On exploring, bony protuberences seemed to be scattered all over the upper portion of the widespread and irregular growth which invaded and obliterated the antrum and pressed upward toward the lower orbital plate. With chisel and hammer the author chiselled away the growth to form a new antrum, a very difficult task, as was also the making of a passage through the anterior nasal cavities, still preserving the natural contour of the nose. Nasal respiration was established. The external wound healed by first intention and the patient has been able to breathe continuously through her nose, and has even acquired the sense of smell to a considerable degree. The scar on the face is barely visible, and the disfigurement of the growth has disappeared. EATON.

II. MOUTH AND NASO-PHARYNX.

Epidermolysis Bullosa Hereditaria of the Mucous Membrane—GUSTAV SPIESS—*Archiv. für Laryngologie*, Band ix, Heft 3, 1899.

After a description of this rare disease as it occurs on the skin, the author relates a case of his own which he cannot regard as anything else than this same disease affecting chiefly the mucous membranes of the mouth and throat. In this situation also the trouble is characterized by the appearance of blebs or vescicles following the slightest trauma. For instance, in making a laryngological examination he was unable to hold the tip of the tongue between the fingers for fear of giving rise to the condition in question. The swallowing of rough or "scratchy" food would almost inevitably bring on an attack. Often these blisters formed in such numbers and of such a size as to close the esophagus and make swallowing impossible until such time as the loosened epithelial layer was thrown off and the liquid contents of the bleb discharged. The fluid was usually clear, although sometimes bloody. After the desquammation had taken place the underlying area was tender and very painful.

All treatment was unfortunately without avail. VITTUM.

Of What Value is Gargling?—*Mary. Med. Journ.*, September, 99.

Saenger gives the results of a series of experiments. He touches the tonsils of patients with methylene blue and then made them gargle with water, which always came away clear, showing that the water did not reach the faucial space—rarely, in exceptional cases, are the tonsils and the pharyngeal wells reached. It is therefore more rational to paint these parts with medication. LEDERMAN.

Recurrence of the Tonsil after Operation—F. E. HOPKINS—*N. Y. Med. Journal*, December 2, 1899.

Various opinions by different observers are incorporated in this paper. The author is of the opinion that if amygdalotamy is properly performed, the recurrence of the gland is not likely to occur. However there is an exception to all rules, as illustrated in the case under his immediate observation.

The operation was performed upon a girl thirteen years of age; some adenoids were removed also under ether at the same time. The tonsils were thoroughly removed, pressure being made from the outside. An examination three weeks later justified such an expression. In four months the patient was seen during an attack of acute inflammation of the tonsillar tissue, and the left gland was found considerably enlarged. Two months after the tonsil was again removed, and under the microscope proved to be simple hypertrophy.

A tuberculous or specific dyerasia and an acute inflammation of the stump may be considered causes of recurrence.

LEDERMAN.

Adenoids Neglected and Some of the Results—M. H. GARTEN—*West. Med. Rev.*, November, 1899.

Picturing the far-reaching evils resulting from neglected adenoids the duty of the family physician to look out for, and detect the condition is strongly urged. EATON.

A Case of Complete Occlusion of the Posterior Nares—E. D. CAPPS, Forth Worth, Texas—October, 1899.

Digital examination of the patent, a woman of thirty years, showed firm adhesions between the soft palate and the post-pharyngeal wall. Under complete ether anesthesia, a steel sound was introduced into the pharynx, which was found to be almost occluded by a bony mass, the hard palate extending upward and attached firmly to the base of the occipital. The obstructing mass was cleared with a chisel and curette, the adhesions of the soft palate brokeh up by means of the finger and steel sound, and the passage packed with iodoform gazue. The resulf was satisfactory.

The author believes the case to be of congenital origin, and that the adhesions of the velum resulted from the presence of adenoids which had atrophied. SCHEPPEGRELL.

Innocently Acquired Syphilitic Infection of the Throat—F. R. PACKARD—*Journ. Eye, Ear and Throat Dis.*, October, 1899.

A woman, aged forty, unmarried and a professional nurse complained of sore throat. Objectively there was a large, irregular superficial ulceration with a grayish slough on the surface of the right tonsil involving the right anterior faucial fold. The cervical glands on the right side were very much enlarged. The history was that a year before she had had scarlet fever from which she entirely recovered, save some soreness of the throat. One month after her attack she attended a confinement case of a woman who had mucous patches all around the vulva and anus, and also in her mouth, but of this she knew nothing until she had attended the case for a week or two, during which time she had been frequently kissed by the patient. Then a sore developed on her upper lip. The doctor in attendance then told her the patient had syphilis, and that the sore on her lip resembled a chancre. The points of interest are:

1. The apparently genuine history of infection.
2. The difficulty of making an early diagnosis.
3. The absence of all symptoms of syphilis except those presented on the lips and tonsil.

The literature of the subject is given and it is maintained that syphilis of the mouth and throat is very commonly of innocent origin, and that the difficulty of making a diagnosis of syphilis of the tonsil is sometimes very great. EATON.

Treatment of Naso-Pharyngeal Adenoids—L. J. LAUTENBACH—*Journ. Am. Med. Assn.*, November 18, 1899.

The author condemns the use of general anesthetics in the removal of adenoids as both dangerous and unnecessary.

He uses no other instrument than the finger nail, or, when that is out of repair, an artificial finger nail which he has devised.

In the discussion of the paper, Theison, Mayer, Stuckey, Keller, Quinlan and Rogers strongly condemn the positions taken by the author. A. H. ANDREWS.

Hypertrophies in the Tonsillar Ring—DANIEL B. HARDENBERGH—*Medical Record*, Nov. 25, 1899.

Attention is called to the "adenoid ring" of Waldeyer. The tendency toward the disappearance of the tonsillar tissue as life progresses strengthens the contention of their rudimentary and obsolete nature.

Hypertrophies of the faucial tonsil have a greater tendency to continue into adult life, and the condition occurs when new connective tissue takes the place of the lymphoid, and is recognized as a hyperplastic form.

The various exciting causes are mentioned. The hereditary element plays an important role. The importance of these hypertrophies on the organs of hearing is dwelt upon. The author thinks that the overgrowth in the post nasal space should be removed without a general anesthetic. Occurrence does occur in a less proportion of cases. LEDERMAN.

Observations on Adenoids and Enlarged Tonsils and Their Removal—D. J. GIBB WISHART—*Montreal Medical Journal*, October, 1899.

Data are gathered from one hundred and three operative cases seen in the author's clinic in the Victoria Hospital for Sick Children during a period of four years—and the cases are classified.

The author prefers to diagnose the presence of adenoids through the inferior meatus of the nose by inspection. Emphasis is laid upon the necessity for gentleness in all manipulations of the nose and throat in children, with a view to accurate diagnosis and successful treatment.

With regard to treatment, operative procedure is advocated in properly selected cases. This must be done under an anesthetic, which must produce profound narcosis. Chloroform was used as a rule, but nitrous oxide with oxygen is advocated where one gland alone is enlarged, or where the operation is likely to be speedily performed.

The patient is placed in the prone position with the head dropped over the edge of the table, and for adenoids the forefinger of the left hand is kept in the naso-pharynx, to guide the curette. The author has used extract of supra-nasal capsule to lessen the blood flow, but without satisfactory results. No untoward results of operation were needed. GIBB WISHART.

Removal of Tonsil and Adenoids, followed by Fatal Result—J. A. Stucky—*Annal Otol., Rhinol. and Laryn.*, May, 1899.

Case of a "bleeder," aged fifteen, reduced in health from "grippo," and presenting an extra large tonsil already affected with peri-tonsillar abscess, which was discharging when patient presented. No acute symptoms. No unusual bleeding at time of operation, but within two hours profuse secondary homorrhage occurred which yielded to treatment, leaving the patient in such a weakened condition that in spite of whiskey, strychnine, digitalis and transfusion death occurred nine hours after the operation, and seven hours after the secondary hemorrhage. F. C. E.

Two Cases of Cut Throat with Opening of the Air-passage—Edward R. C. Earle—*Lancet*, October 28, 1899.

It is still an unsettled question whether it is desirable in all cases of cut throat to completely close the opening into the air-passage. It was formerly taught that in no case should the wound be quite closed, for edema of the larynx was very likely to supervene and prove fatal before help could be obtained. Since the introduction of the use of antiseptics the tendency has been towards immediate closure of the wound of the larynx, for it has been found that the diminution of sepsis has resulted in a great decrease in the number of cases in which edema of the larynx has occurred, and the teaching of the present day is generally that the wound may be completely closed at once with impunity. This is only true of cases which are seen a short time after the infliction of the wound, and in which no laryngeal inflammation has commenced. When, however, many hours have intervened between the injury and the operation, it is advisable to leave the aperture in part unclosed, so that asphyxia cannot supervene, and this is especially advisable, when help cannot be speedily obtained should suffocation threaten. Dr. Earle's two cases are interesting examples of severe cut throat, and show how comparatively slight is the general disturbance in such cases if no large vessels have been severed. They are described in detail. The results in both these cases were eminently satisfactory, though they had been subjected to the most unfavorable conditions. Both patients arrived at the hospital considerably over twelve hours after the infliction of the injuries, after having travelled in an uncovered cart, exposed to the mid-day rays of a tropical sun, a distance of twelve and thirteen miles respectively. In the latter case the wound had not even been covered during all that time. Luckily, no large arteries had been severed. In neither case were there any lung complications. This fact was no doubt due to the warm temperature of the air, for the thermometer must have registered from 110° to 120° in the sun. In both cases recovery was complete, the acts of speech and deglutition being unimpaired. StClair Thomson.

III. ACCESSORY SINUSES.

Chronic Empyema of the Antrum of Highmore—Operation by the Caldwell-Luc Method—A. W. De Roaldes—*N. Y. Med. Journ.*, January 6, 1900.

Five cases operated upon by this method are reported. Some comments upon the technique are made by the author. In making the buccal incision the aim has always been to obtain an inferior muco-periosteal flap of sufficient width to permit later on of easy suturing in order to obtain union by first intention. This must be accomplished to avoid possible secondary infection of the sinus from the oval cavity. The author, however, does not fear such infection, even though a fistulous opening through the alveolar process exists, providing the opening is not too extensive.

It was advisable to bring the incision nearer the frænum than formerly advocated. The bone opening should be more ovoid in character and nearer to the nasal wall of the antrum, so that it will be easier to establish the artificial hiatus through the nasal wall. Thorough curetting of the antral cavity must be carried out. Furthermore a partial turbinectomy of the anterior end of the inferior turbinal should be performed with biting forceps. This portion of the operation can be postponed until the latter part of the technique, in order to avoid delay with the hemorrhage, which may be checked with firm gauze packing (Dr. Luc does not advocate the resection of the turbinal.) A good size nasal opening is recommended. Gauze drainage through the nasal hiatus is carried out. Good results are reported in from four to six weeks.

Lederman.

The Operative Treatment of Frontal and Maxillary Sinusitis—F. W. Hinkel—*N. Y. Med. Jour.*, December 23, 1899.

A number of cases are reported upon whom surgical treatment was practiced. In one frontal case the antrum disease marked the former. The external operation was performed with immediate closure of the external wound after a drain of iodoform gauze had been carried through the infundibulum, which had previously been enlarged by the curette. A good result was obtained.

In three cases of antral disease the Luc operation was carried out, with pleasant results in two cases. According to the author's opinion, the suturing of the gingivo-labial incision is not necessary, as the wound coapts readily without stitches. The wound need not be disturbed if the patient is fed upon soft food, and eating is carried on with the use of the other side of the mouth. The patient must avoid blowing the nose violently, so as not to disturb the wound.

Lederman.

Confined Suppuration of the Frontal Sinus with Spontaneous Rupture—Report of Case—KYLE—*N. Y. Med. Jour.*, Dec. 16, '99.

These symptoms occurred in a female sixty years of age. She experienced a sensation of fullness in the left side of the nose, without pain. The nasal secretion varied from a thin watery to a thick tenacious discharge. There was some soreness at the inner angle of the eye and a swelling between the eyes. About five months after the initial symptoms, marked swelling in the limbs was noticed, together with an aggravation of the other symptoms. The tissue on the forehead was so swollen that it hung down over the supra-orbital ridges. In the median line, about an inch above the supra-orbital ridge, there was a marked projection with distinct redness. Through this site the abscess discharged after a slight crust formation was removed. No distinctive pathological process could be discovered in the nose, except an edematous condition of the mucous membrane of the left side, which was readily reduced with an eight per cent cocaine solution. The probe passed through the external sinus into the nasal cavity without much pressure. Drainage was good, and with the use of antiseptic solutions the wound healed in two months. LEDERMAN.

IV. LARYNX AND TRACHEA.

Another Case of Functional Expiratory Spasm of the Glottis—PROF. V. UCHERMANN—Christiana—*Archiv für Laryngologie, Band ix, Heft 3.*

The symptom was a sound somewhat resembling "hawking," which occurred every five or six seconds (at the end of each expiration) during speech. The sound was absent if the man was not speaking.

The mirror showed that the false chords were somewhat injected. The true chords normal. At the end of each expiration the chords approach each other, but the processus vocales do not quite touch, Painting with 20% solution of Cocaine does not alter the condition. The author remarks, on commenting on the case, that we have here a sort of abortive cough. It is, however, distinguished from Gottstein's nervous cough by the fact that while the latter ceases during speech, in this case it only occurs at that time. The case is apparently of central or bulbar origin. This is made apparent by the regularity of the spasm. It is not affected by cocaine, therefore not depending on reflex of the mucous membrane. It is brought about by speaking, there is, therefore, some cerebral influence. It is a hyperaesthesia or morbid irritability of the expiratory respiration center, depending probably on some local vascular trouble. VITTUM.

The Subcerebral Center of Phonation—A. ONODI—*Archiv. für Laryngologie*, Band ix, Heft 3, 1899.

After making a series of experiments on dogs, the results of which have been published elsewhere, the author came to the conclusion that a phonation center exists in the floor of the fourth ventricle, between the origin of the vagus and the posterior corpora quadrigemina.

Following up this idea he requested the conductors of the clinic to save up for him the bodies of those children who had undergone craniotomy and yet had phonated during life, as well as those monstrosities who had phonated.

As a result of this request he received in the course of two years, two children who had undergone craniotomy and two monstrosities who had phonated. A careful examination of these cases showed that, in each of the children on whom craniotomy had been performed the region in question was intact. In the two monstrosities, while most extensive cerebral and cerebellar maldevelopment was present, yet the region in question was developed in both instances.

Two reports are also referred to where observations were made during life and a careful examination of the nervous centers made after death. These cases of Darvas and Prof. Kehrer were a monstrosity and a perforated child. The results of both bear out the views of the author.

The author makes the following statements:

1. Destruction of the cortical phonation centers has no influence on phonation.

2. The destruction of the great ganglia of the brain, the thalamus, the corpus striatum and the nucleus lentiformis does not influence phonation.

3. The total division of the brain in the plane of the anterior corpora quadrigemnia does not destroy phonation.

4. The lesions of the cerebellum have no influence on phonation.

5. The total division of the medulla oblongata above the origin of the vagus arrests phonation at once and permits only respiration.

As a result of his experiments on animals and his investigations on monstrosities and perforated children, the author sets up the following thesis:

"That the subcerebral phonation center which we have demonstrated to exist in the dog also exists in the human being, and further, it is similarly situated between the posterior corpora quadrigemina and the origin of the vagus." VITTUM.

A Case in which a small Silver Coin was lodged in the Larynx for Four Weeks; Removal with Forceps under Cocaine—WALKER DOWNIE—*Lancet*, October 14, 1899.

It is somewhat surprising that the coin in the following case did not cause more dyspnea, obstructing as it did the rima glottidis to so great an extent. Had it been allowed to remain much longer in the larynx, it would have led to ulceration, which might have given rise on healing to such contraction as to have interfered permanently with speech. From a consideration of 1,674 cases of foreign bodies in the air passages collected from various sources, Bosworth* has shown that 28.6 per cent of the patients when no operation was performed died, and 25 per cent died after operation.

* "Diseases of the Nose and Throat," third edition, p. 729.

A man, aged forty-six years, was seen by the author at the Western Infirmary, Glasgow, on September 8, 1899. The patient complained of loss of voice and difficulty in breathing, particularly on exertion, of four weeks' duration. The story which he gave was that on August 12th he was intoxicated. In the early part of that day, while sober, his voice was clear and he had no difficulty in breathing, but on waking up on Sunday morning he could only speak in hoarse whispers, he had considerable pain over the larynx, his respirations were noisy, and he felt as if his windpipe was closing. These symptoms were supposed to be due to a "bad cold," and the use of many homely remedies was accordingly resorted to, without, however, giving him any relief. His nephew. who had been with him on the previous night, told him that he had swallowed a "threepenny-bit," but the patient had no recollection of the alleged occurrence, and maintained that he had done nothing of the sort. (This latter statement was not made until after the coin had been removed.)

On laryngoscopic examination the parts were found to be deeply injected. Both ventricular bands were swollen and inflamed. The greater part of the glottis was seen to be occupied by a flat body thickly covered with muco-pus. The body lay on the vocal cords so that their extremities, anteriorly and posteriorly, alone could be seen. This foreign body was then gently mopped over with a swab of cottonwool on a laryngeal probe, after which its nature was recognized without difficulty. Although it had lain in the larynx for four weeks, the metal for the most part was bright, and the raised edge and the figure in the center of the threepenny-piece were readily seen in the mirror. The interior of the larynx was anesthetized with cocaine, and the coin was at once removed by means of Mackenzie's rectangular laryngeal forceps opening antero-posteriorly. Flat foreign bodies fixed in the position which this one occupied are most readily extracted by forceps of Wolfenden's pattern, but on this occasion none were at hand. After the removal of the coin the upper surface of both vocal cords was seen to be eroded. This erosion quickly healed under the influence of soothing inhalations, and within one week from the date of the removal of the threepenny-piece the patient had fully recovered his voice, and all symptoms of the laryngeal distress complained of while the coin was lodged within the larynx had disappeared. STCLAIR THOMSON.

The Theory of Abdominal Breathing in Singing—P. HELLAT—St. Petersburg—*Archiv für Laryngologie, Band ix, Heft 3.*

The author takes issue with the older writers who held that the diaphragm was the chief factor in abdominal breathing, and in singing accomplished its object by compressing the air in the thorax into the upper part of the lungs, so that a strong and steady stream would issue from the larynx during tone production.

Another view involved the "lutte vocale" where certain muscles antagonized one another, thereby producing the strong and steady stream of air which was supposed to be the object of abdominal

breathing. The author takes a widely different view. The object of abdominal breathing is not to insure a prolonged expiratory act, but to put air in the chest cavity in the best condition to favor resonance. This view of course completely demolishes the older arguments, if it be true. In this case the thoractic walls are held nearly immovable, and the varying changes of pressure are accomplished by means of the diaphragm and the abdominal muscles.

VITTUM.

The Treatment of Chronic Bronchitis by Means of the Ipecacuanha Spray—ARTHUR T. DAVIES—*International Clinics*, Vol. 1, 9th Series, April, 1899.

The author does not lay claim to being the originator of any new or novel form of procedure in the treatment of chronic bronchitis. He credits the authorship of this method to Drs. Ringer and Murrell, his attention being directed to it, some years ago, by reading a paper written by these gentlemen upon "The Value of the Ipecacuanha Spray in Winter Cough and Bronchitic Asthma." He states that their manner of employment consists in spraying the respiratory passages with vinum ipecacuanhae, either pure or diluted with three times its volume of water, using the ordinary hand-ball-spray apparatus or the steam atomizer of Siegle or Richardson. The patient is directed to inhale deeply, at the same time closing the nose with the fingers. From one to four drachms of the drug is the amount sprayed at a single sitting, the patient being directed not to swallow any of the spray which accumulates in the mouth.

The author reports a few cases treated as indicated and says his experience with the system satisfies him that the claims of its originators are not exaggerated.

The advantages claimed for it are that, without the internal administration of drugs, it rapidly relieves the dyspnea and tightness across the chest, loosens the secretions and promotes expectoration, secures sleep and shortens the duration of the disease. The amount and strength of the spray requires careful regulation, as in some cases it is at first not well borne and causes vomiting and even severe paroxysmal dyspnea. Because of excessive arching of the tongue, some patients fail to derive much benefit. The treatment is not applicable in true asthma, the ipecacuanha appearing to aggravate the disease. It is particularly applicable in those cases giving a history of repeated yearly attacks of bronchitis, distressing dyspnea, orthopnea, violent paroxysmal cough, difficulty of expectoration and sleeplessness.

The author incidentally mentions trinitrin as being another remedy which has been valuable in his hands, especially in the cases presenting great dyspnea and venona engorgement, and calls attention to the value of the various forms of tar in cases where there is only a moderate degree of dyspnea. ROSS.

V. EAR.

Otitis Externa Tropica—P. N. GERRAD—*Lancet*, September 23, 1899.

The author gives a description of an affection which is of fairly common occurrence in Singapore and the Malay States. The symptoms somewhat resemble those associated with furunculosis, although the discharge of pus from the outer ear may take place painlessly. The results of bacteriological examination of the discharge are given, and an antiseptic line of treatment is suggested.

STCLAIR THOMSON.

Deafness as a Result of the Abuse of Phenacetine—H. GULEKE—*Zeitschr. für Prak. Aerzte*, November 15, 1899.

The author gave a prescription for powders containing 0.7 of phenacetine, one powder to be taken twice daily. Through the stupidity of those in charge, the powders were given every two hours; so that in the course of less than 24 hours the patient took 7.0 of the drug.

Aside from other toxic symptoms, the patient was entirely deaf. On the subsidence of the general symptoms the deafness continued and has proved to be permanent. Meningitis could be excluded, and the only explanation is that the function of the ear was entirely destroyed by the phenacetine. VITTUM.

The Politzer and Gruber Clinics—JOHN P. MORSON—*The Canad. Pract. and Rev.*, Vol. xxiv, No. 10.

Dr. Morton, in a short article, details in a very interesting manner the methods of diagnosis employed in both of these noted clinics. *Inter alia*, he makes the following statements: "Electric headlights are not used for illumination of the ear." In the diagnosis of catarrhal adhesive processes in the middle ear, "Bing's ingenious test is used to test the mobility of the stapes. Through the medium of a Eustachian catheter, an ear trumpet is connected directly with the tympanic cavity; the sound waves are thus conducted immediately through the base of the stapes and membrana tympani secundaria to the labyrinthine fluids. Another trumpet is connected with the external meatus. If speech cannot be heard through the latter source, but can easily be heard when spoken into the tube connected with the catheter, the stapes is then judged to be freely movable and the malleus and incus to be in some way stiffened.

Dr. Bing has also instituted a method which aids in differentiating ear trouble from nose trouble. The sounding tuning fork is placed upon the mastoid process; as soon as the note ceases, the external meatus is closed with the finger, and if the sound is not again heard middle ear disease is diagnosed."

In auditory nerve disease, good perception for the high notes is considered of no value, for so many cases of pronounced nerve

trouble are experienced in which excellent perception for the highest notes is retained. Rinne's test gives a positive result, the explanation being as follows: Normally the perception of the tuning fork through the air is longer than through the bone; in either case the nerve is finally called into action, and when it is diseased the air and bone conduction must suffer equally, which leaves them in the same relation to each other as in the normal condition, viz., positive Rinne. The important point, then, is not that we have a positive Rinne, for such is found in normal conditions, but that the Rinne is rendered positive by the shortening of the bone conduction." GIBB WISHART.

The Conservative Special Treatment of Chronic Suppuration of the Middle Ear—STETTER—*Berliner Klin. Wochenschr.*, September 11-18, 1899.

This scholarly paper, which runs through two numbers of the journal mentioned above, deserves to be read by all who are interested in treating the ear, therefore, by all physicians. After remarking that not all cases of middle-ear trouble demand the radical operation, the author cites Lucae, who gives the results of his great experience: that, the general symptoms which justify the radical operation, are marked dizziness with disturbances in the gait, nausea and vomiting; while the local symptoms have to do with the duration of the disease, the condition of the post-aural region, the frequency of attacks of pain, facial paralysis, and the nature and quantity of the discharge.

In a thoroughly moderate and scientific manner the author then pleads for a more universal recourse to medical before proceeding to the heroic measures included in the radical operation. One great trouble met with in these cases was to find something which would render the thick tenacious pus more fluid so that the middle ear might be properly cleansed. The author thinks he has found this remedy in iodide of potash. His formula for the solution will be given later on. He also urges the use of Haug's chinolin-naphthol gauze, which on account of its softness and looseness of mesh can be gently packed deep into the meatus, and even into the middle ear itself, through the large perforation which is usually present in these cases. Granular conditions he combats with pure trichloracetic acid when the granulations are prominent. When merely a finely granular condition of the drumhead or middle ear exists he advises the insertion of a tampon saturated with a 10 per cent solution of the acid.

To overcome the fetid and stinking condition of the discharge when present he makes use of menthoxol, a remedy which contains peroxide of hydrogen, and in contact with pus gives off oxygen, leaving behind menthol dissolved in alcohol. Most satisfactory results were obtained, the terrible fetor gradually disappearing, the discharge losing its deep yellow color and thin ichorous condition, and displaying the ordinary creamy color and consistence of laudable pus. The author himself sums up his treatment as follows:

(a) Careful cleansing of the meatus and middle ear by means of tampons saturated in lysol water—not with the syringe—after first rendering the pus fluid by dropping in the following: Sol. Kali Iod. 2 to 100, lysoli puri 20 drops, and followed by packing the meatus and middle ear with chinolin-naphthol gauze, at first two to three times daily, less often as the pus diminishes.

(b) A fetid secretion is to be combatted by dropping in three to four times daily a solution of menthoxol and aqua distil. equal parts, and afterwards the use of chinolin-naphthol gauze.

(c) Granulations when sufficiently large are to be removed by the snare or galvano-cautery. When smaller they are to be removed with pure trichloracetic acid. When no isolated granulations can be seen but rather an even granular thickening of the mucous membrane of the promontory wall, the use of tampons soaked in a 10 per cent solution of the acid is indicated.

(d) A periostitis of the mastoid process does not in itself uncontionally demand the radical operation. A two days' treatment with Burow's poultices, if ineffectual, may be followed by Wilde's incision. If, however, cicatrization does not follow in two or at most three weeks, the wound generally presents a condition of fungous granulation and the middle-ear suppuration shows no tendency to heal. Then should follow the radical operation after Stacke.

The author is most modest and moderate in advancing his views, and admits, of course, that numerous cases are met with which demand the radical treatment at once. He also admits that while his results have been good, yet the number of cases is small. Yet he maintains that many cases have been subjected to the dangers and discomforts of a radical operation which might have been cured by medical measures. And at the most he expresses the hope that this paper may be the means of stimulating investigation in this direction, and a sufficient number of cases may be reported to give us a firm ground for basing an opinion. One of the advantages emphasized by the author is that if this method of procedure be established many cases would be cured, which cannot (owing to distance, lack of means, etc.) receive the benefit of a radical operation.

In concluding, the author urges that physicians pay strict attention to those cases of otitis which follow scarlatina, measles, etc., and which are so frequently the cause of chronic otitis in later years.

VITTUM.

VI. DIPHTHERIA, THYROID GLAND, ESOPHAGUS, ETC.

Antitoxin in the Treatment of Diphtheria—B. H. PORTUONDO—*Med. Rev.*, Oct. 9, 1899.

A history and review of the discovery and development of antitoxin. The great value of this remedy, and the fallacy of the arguments brought against its use by opponents, are points well presented.

EATON.

Diphtheritic Paralysis in Cases Treated with Antitoxin—F. J. WOOLACOTT—*Lancet*, August 26, 1899.

Interesting tables are given showing the percentage of paralysis, the influence of age, the relative frequency of the various forms of paralysis, the severity of the paralysis, the muscles first affected and the date of the onset of paralysis. In conclusion, the influence of antitoxin on diphtheritic paralysis may be summarized as follows: Up to the present the percentage of paralysis has increased on the whole. There is some evidence that large doses—*i. e.*, not less than 4,000 units—of antitoxin are more effective than small ones, both in preventing paralysis and diminishing the mortality due to it. The earlier antitoxin is given in diphtheria, the less likely is paralysis to follow. Should it occur after early injection, it will probably be mild and of comparatively short duration. The type of paralysis has, on the whole, become less severe or, at all events, less dangerous to life. Finally, diphtheritic paralysis has become more prone to attack the young. This change in age incidence has possibly made some minor differences in the relative frequency with which the various forms of paralysis are observed. The practical conclusion is that the full value of antitoxin is only obtained by using it early and in efficient doses. If this be done, not only is life saved, but tedious complications are prevented, or at least deprived of their dangerous characters.

STCLAIR THOMSON.

A Suggestion as to the Treatment of Graves' Disease by the Administration of Bile by the Mouth, Hypodermically and Intrathyroideal, with Cases—C. M. ALLAN—*Lancet*, August 26, 1899.

After accepting the view that this disease is an affection of the thyroid gland rather than of the nervous system, and giving some consideration to recent views on the functions of the liver, the author reports some cases in support of the line of treatment mentioned in the title.

STCLAIR THOMSON.

Diphtheria: Its Identity and Transmissibility from Lower Animals to the Human Subject—WILLIAM MEANY—*American Practitioner and News*, November 15, 1899.

Authentic cases have been reported in which diphtheria was developed from a similar disease in fowls and cats. A disease has been observed in swine, sheep, horses, cattle and dogs which appears exactly similar to human diphtheria.

W. SCHEPPEGRELL.

BOOK REVIEWS.

The Cerebro-Spinal Fluid. Its Spontaneous Escape from the Nose; with Observations on its Composition and Function in the Human subject. By StClair Thomson, M.D., M.R.C.P., London, F.R.C.S., England, Physician to the Throat Hospital; Surgeon to the Royal Ear Hospital, London. One octavo volume, 147 pages, bound in muslin. Cassell & Co., London, Price, 5s.; American agents, Wm. Wood & Co., New York; $1.50 net.

In this original monograph the author desires to establish a hitherto unrecognized pathological factor in the matter of the cerebro-spinal fluid.

The escape of the cerebro-spinal fluid from the nose as a result of traumatism has long been known and occasionally recorded; the *spontaneous* escape of cerebro-spinal fluid from the nose, however, is the special feature of this monograph.

In the description of nasal hydrorrhea by recent writers, the cerebro-spinal fluid has received but little recognition and has been indifferently analyzed.

The author has had exceptional advantages in minutely recording his observations in a case of this character, where the profuse discharge from the nose existed for over five years.

A valuable adjunct of this monograph is the careful description of the chemical and microscopical analysis of the cerebro-spinal fluid, which was discharged from the nose.

Nine cases have been collected, described and tabulated, where the discharge from the nose was undoubtedly cerebro-spinal fluid.

In a second table twelve cases of rhinorrhea are recorded where the fluid discharged was probably cerebro-spinal fluid.

The monograph is a valuable contribution, not only to physiology generally, but to the pathology and identification of various forms of nasal hydrorrhea.

On the Prevention of Eye Accidents Occurring in Trades. By Simeon Snell, F.R.C.S., Edinburgh. Published by John Bale & Son, Oxford House, 85, 87, 89 Great Fitchfield Street, London, W. Price, 1s. net.

This attractive monograph is reprinted from the *British Medical Journal*, contains a series of excellent illustrations of various industrial pursuits in which the eye of the mechanic is unusually exposed.

The author offers the results of his large and must valued experience in this special line. His conclusions are put forth in a most concise and interesting manner, and are of particular worth to physicians living in large manufacturing districts.

Over 1,000 Prescriptions or Favorite Formulæ of Various Teachers, Authors and practicing Physicians. The whole being carefully indexed, and including most of the newer remedies. The Illustrated Medical Journal Co., Publishers, Detroit, Mich. Cloth, 300 pages, postpaid $1.00.

This is the second edition of this handy manual, and is just from the press; it has nearly 100 pages of new matter added. The practical worth of this kind of a book consists in its having a handy and complete index. The book has some 16 pages of small type devoted to this object, and some of the lines have as many as 20 different references to as many different formulæ; this would go to show that there are about 2,000 different prescriptions given in the volume. We notice that many of the newer remedies are among the prescriptions, thus bringing the treatment of many of the diseases down to date. Both old and new writers of both home and foreign countries are represented among its formulæ.

Blank pages are frequently introduced, so that a handy place is furnished for recording any new prescription that one might wish to preserve.

Progressive Medicine—Volume IV. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Lea Brothers & Co., Philadelphia and New York. Octavo, handsomely bound in cloth, 398 pages, 51 engravings and 5 plates.

As in the previous volumes of this series, all monographs appearing herein, which especially refer to otology, rhinology and laryngology, will receive individual attention in our Bibliography and Abstract Department.